COUNTY OF LOS ANGELES

REGIONAL PLAN of HIGHWAYS

SECTION 2-E

SAN GABRIEL VALLEY

1929

COLLEGE
OF THE PACIFIC

GIFT OF
Mr. Leonard S. Smith

WITHDRAWN

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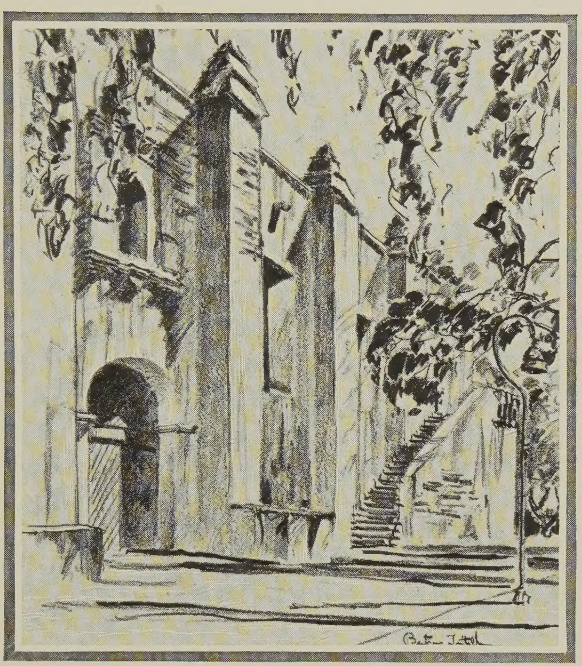


Sketch by Bertram Teitelbaum
County Architect's Office

MISSION SAN GABRIEL
(1771)

Los Angeles county, Calif. Regional planning commission

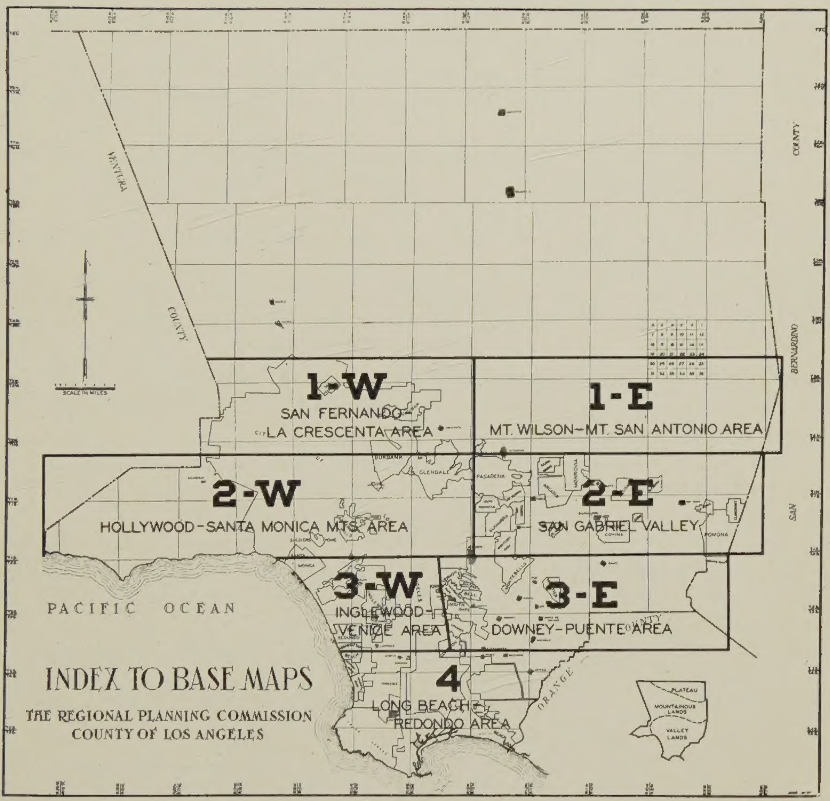
College of the Pacific
Stockton, Calif.

A COMPREHENSIVE REPORT

on the

REGIONAL PLAN OF HIGHWAYS

SECTION 2-E
SAN GABRIEL VALLEY



THE REGIONAL PLANNING COMMISSION

County of Los Angeles

Hall of Records, Los Angeles

1929

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OFFICE OF THE BOARD OF SUPERVISORS
of the
COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

TUESDAY, JULY 16TH, 1929

The Board met pursuant to adjournment. Present: Supervisors R. F. McClellan, Chairman presiding, Fred T. Beaty, Frank L. Shaw, Sidney T. Graves and Henry W. Wright; and L. E. Lampton, Clerk, by Mame B. Beatty, Deputy Clerk.

In re: Proposed Comprehensive Network of Through Highways in County of Los Angeles: Resolution adopting Regional Plan of Highways known as Section 2-E (San Gabriel Valley).

On motion of Supervisor Beaty, duly seconded and carried by the following vote, to wit:

Ayes, Supervisors Beaty, Shaw, Graves, Wright and McClellan; Noes, none, it is ordered that the following resolution be, and the same is hereby adopted, to wit:

WHEREAS, the Board of Supervisors of the County of Los Angeles has heretofore urged the necessity of a comprehensive network of through highways extending over the entire County; and,

WHEREAS, the Regional Planning Commission was created and charged with the duty of preparing such a plan; and,

WHEREAS, by virtue of the authority conveyed in Rule 2, Ordinance No. 806 (New Series), which defines the powers and duties of the Regional Planning Commission, said Commission has made an exhaustive study and prepared a practical, comprehensive highway plan of that section of the County known as 2-E, embracing the entire San Gabriel Valley, it being the first of several such studies to be completed; and,

WHEREAS, this comprehensive highway plan of the San Gabriel Valley coordinates the major highway plan of every city in the San Gabriel Valley into an effective regional plan of highways in that area; and,

WHEREAS, it is the sense of this Board of Supervisors that this comprehensive Regional Plan of Highways in this Valley constitutes the basic framework for future development, and is conducive to the best development of the County as one large commonwealth;

THEREFORE, BE IT RESOLVED, that this Board of Supervisors hereby approves and adopts this Regional Plan of Highways, known as Section 2-E (San Gabriel Valley), and that the same be and is hereby made the official plan of that section of the County; and,

BE IT FURTHER RESOLVED, that this Board hereby urges the need of the working out of this plan of highways upon the County Surveyor, the County Road Commissioner, the City Planning Commissions, the City Engineers and the Subdivision Engineers, Realtors and Realty Owners engaged in laying out new subdivisions; and,

BE IT FURTHER RESOLVED, that this Board of Supervisors hereby orders that all preliminary and final plans of subdivisions conform with this Regional Plan of Highways wherever practicable.

I hereby certify that the foregoing resolution was adopted by the Board of Supervisors of the County of Los Angeles on July 16, 1929.

L. E. LAMPTON,
County Clerk and ex-officio Clerk of the Board
of Supervisors of the County of Los Angeles.
(SEAL) By (Signed) MAME B. BEATTY, *Deputy.*

BOARD OF SUPERVISORS

COUNTY OF LOS ANGELES

1929 - 1930

R. F. McClellan, Chairman

Fred T. Beaty	Frank L. Shaw
Sidney T. Graves	Henry W. Wright

Everett W. Mattoon
County Counsel

RPC
COORDINATION
COOPERATION
DESIGN
COUNTY OF LOS ANGELES

THE

REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES

1929 - 1930

Mrs. Charles F. Gray
Chairman

R. O. Baldwin
B. R. Holloway

Carl Bush
J. M. Paige

Ex-Officio

George W. Jones
County Road Commissioner

J. E. Rockhold
County Surveyor

STAFF

DIRECTOR
Charles H. Diggs

CHIEF ENGINEER
Wm. J. Fox

STATISTICAL DIVISION
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STAFF ARTIST
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Alice Duggan

Elinor Monroe
Irma Ruther

Margaret Roper
Margaret Cross

Office organization effctive November 22, 1927.

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FOREWORD

This report marks the first definite milestone of progress toward a Comprehensive Plan for Los Angeles County. It is a demonstration of Regional Planning in practice, the foundation of which is formed by an effective Commission; proper direction of the work; sound engineering principles; adequate research and statistics; a comprehensive highway plan; a wholesome regulation of land subdivision; regulation of use of property based on comprehensive zoning; recognition of the problems of landscape design; informational material properly prepared—brief, concise, and with emphasis on visual persuasion; above all, the moulding of public opinion for a comprehensive plan, well prepared and possible of accomplishment.

It is fitting here to express the appreciation of the Commission to its Chief Engineer, Mr. William J. Fox, who made it possible to establish the soundness and practicability of this report and plan, and who has been responsible for the success of the negotiations leading to the approval of the plan by all the official and other authorities concerned.

Charles H. Diggs

Director.

Mr. Charles H. Diggs, Director,
Regional Planning Commission,
County of Los Angeles.

Dear Sir:

I am submitting herewith the report on the Regional Plan of Highways for that part of the County known as Section 2-E, which embraces all of the San Gabriel Valley.

The studies leading up to this report have extended over a period of two full years. The results obtained were accomplished only after a complete and thorough study of all the elements and conditions affecting the wholesome, orderly growth of this area.

Extreme care has been exercised in an effort to set forth a plan that is practical, workable, comprehensive and consistent with modern highway practice.

The necessary official endorsements were secured from the Board of Supervisors of Los Angeles County, the City Councils, City Planning Commissions and City Engineers in the San Gabriel Valley. The official approval of the plan by all the administrative bodies concerned insures its systematic execution.

All the members of the staff of the Commission have given their best to make this report valuable to the official bodies, civic organizations and engineering departments that are engaged in matters vital to the well-rounded development of these communities.

Respectfully,

Wm J. Fox

Chief Engineer.

A COMPREHENSIVE REPORT

ON THE

REGIONAL PLAN OF HIGHWAYS

SECTION 2-E
SAN GABRIEL VALLEY

Submitted November 22, 1929, by Wm. J. Fox, Chief Engineer

I. INTRODUCTION

THE COUNTY A NATURAL PLANNING UNIT

The Los Angeles County Regional Planning Commission was created to fill a real need. City planning, already undertaken by many of the forty-four cities in the County, was found to be unduly limited in its activities by jurisdictional boundaries. The County, on the other hand, was seen to constitute a natural economic planning unit. The importance of having a unified scheme of development for this metropolitan region was evident.

CREATION OF THE COMMISSION

These considerations and the obvious advantages of planning in advance of development instead of merely re-planning, as a corrective measure, areas already built up, led the Board of Supervisors to pass an ordinance creating the first official County Planning Commission in the United States. This ordinance, No. 805 (New Series), was passed on December 18th, 1922.

THE COMMISSION'S POWERS AND DUTIES

A supplementary ordinance, No. 806 (New Series), passed at the same time, defines the powers and duties of the Commission as follows:

"*Rule 1.* Within ten days after the appointment of the first five members of the Regional Planning Commission, and in January of each year thereafter, the Commission shall meet and organize by electing one of its members chairman. Such other officers and committees shall be elected, or appointed by the chairman, as the Commission may find expedient. The Commission may adopt rules and regulations for the administration of its affairs, and may prescribe the duties of its employees, not in conflict with the rules adopted by the Board of Supervisors.

"*Rule 2.* Subject to the direction and control of the Board of Supervisors, the Commission shall have power and it shall be its duty:

> (a) to make a study of the problems of the County with respect to residential and industrial districts, traffic conditions, public parks and boulevards, flood control, sub-divisions, and, in general, with respect to those matters affecting the orderly growth and development of the county as one large commonwealth, and to make to the Board of Supervisors recommendations for the solution of the same;
>
> (b) to advise with the Board of Supervisors and other county officials with respect to their duties affecting any of the above matters;
>
> (c) to seek to interest the various municipalities and other political subdivisions of the county in a joint effort to understand and solve the common problems of development confronting them and the county."

HIGHWAY STUDY AUTHORIZED

A few months later, the Board of Supervisors recognized the fundamental importance of a comprehensive highway plan as the basis for all other phases of the work, and adopted a resolution authorizing this Commission to work out such Plan with other agencies involved. The text of this important document is reproduced in full on the opposite page. It marks the initial step in the development of the Regional Plan of Highways, the first unit of which, now finally approved, constitutes the subject of the present report.

AUTHORITY FOR COMPREHENSIVE HIGHWAY STUDY

The following resolution was adopted by the Board of Supervisors of the County of Los Angeles on May 21st, 1923:

RESOLVED: That this Board of Supervisors urges the necessity of a comprehensive network of through highways, extending over the entire County;

That this system of roadways should provide for a major through traffic way at least 100 feet wide, on the section lines where practicable, or about one mile apart where topography permits;

That secondary highways, not less than 80 feet in width, should be located on the half mile section lines where practicable, or at about an equal distance through rolling country, as relief thoroughfares;

That by-pass streets, 60 feet in width, running through and parallel to the major and secondary highways, should be provided along the quarter sections when possible, to take care of overflow traffic from the major and secondary highways;

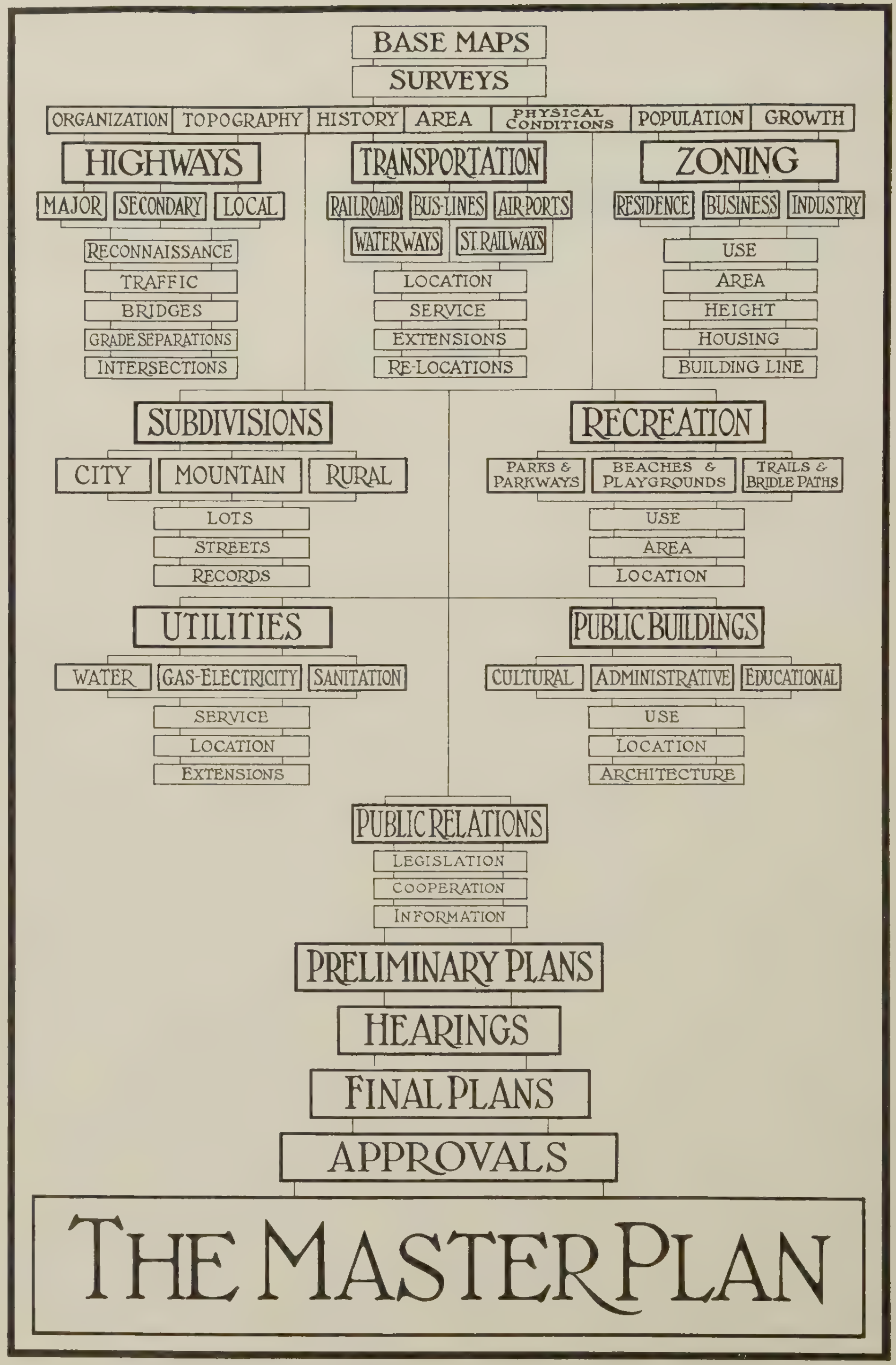
That this Board urges the need of working out this system or network of highways upon the County Surveyor, the Engineer of the County Road Department, the Regional Planning Commission, the City Planning Commissions, the City Engineers, the Subdividing Engineers, and the Realtors and Realty Owners engaged in laying out new subdivisions.

And this Board of Supervisors suggests that all preliminary and final plans for subdivisions conform to this proposed comprehensive system of through highways.

L. E. LAMPTON, County Clerk
and ex-officio Clerk of the
Board of Supervisors.

By A. M. McPherron,
Deputy.

AN OUTLINE FOR REGIONAL PLANNING



PREPARED BY THE REGIONAL PLANNING COMMISSION — COUNTY OF LOS ANGELES 1928.

ORGANIZATION OF THE TECHNICAL STAFF

The first care of the Commission was the building up of an adequate staff. Though not a large one, this staff has been carefully chosen as to training and capability. Mr. Charles H. Diggs, the Director, has divided the staff into six technical sections as follows:

Research Section
Highway Section
Subdivision Section
Zoning Section
Landscape Design Section
Pictorial Section

In addition, there is a stenographic force under the supervision of the Secretary, who also meets callers at the office, makes appointments, and handles all details of office management.

LIAISON BETWEEN SECTIONS

Each of the technical sections is headed by a man especially qualified in his particular phase of regional planning work. The Chief Engineer, under the supervision of the Director, coordinates the work of all. There is thus a systematic and constant interchange of ideas and information between the various sections, so that each piece of work turned out by any section in reality represents the best effort of the department as a whole.

EFFICIENCY OF THE STAFF

The heavy demands upon the technical staff of the Commission have made it necessary to insist upon a high degree of efficiency in its operation. The opening of subdivisions, the building of new highways, and other current activities in all parts of the four thousand square miles of territory included within the County, bring special problems before the department every day; for all such development must be properly correlated with the Regional Plan. At the same time the slow, careful preparation of the ultimate plan itself must not be neglected. Thus, if planning is to be kept ahead of development, every stroke of every draftsman's pen must be made to count both for present needs and for the future. The manner in which this dual task is being performed is a clear demonstration of the efficiency and zeal of each member of the staff.

POLICIES HIGH STANDARDS

The policies of the staff are determined by the Commission itself, which meets twice monthly. The Commission has consistently upheld the office in its determination to set the highest possible standards of accomplishment. It has been of particular assistance in maintaining the viewpoint that not only should the County have a comprehensive plan, but the work of producing the plan should *itself* be planned—so as to proceed steadily and directly toward the chosen goal.

THE COMMISSION AS A COORDINATING AGENCY

The Commission has always proceeded upon the principle that, in the formulation, adoption and carrying out of the comprehensive plan, its function was to serve as a central coordinating agency. It was not to supplant a single one, great or small, of the various official and unofficial agencies interested in securing a wise development of the region. All of these were to be retained and encouraged, and new ones developed where necessary. The Commission, with its trained technical staff, its more detached attitude, and its broader viewpoint was to consult them all, consider their needs, bring them together and enlist their services in the common cause.

COOPERATION WITH CITY OFFICIALS

Many of the cities in the County have active city planning commissions, and these have been called into consultation at all times. Where none existed, there has been a direct contact with the governing body. All of the city engineers have been kept in close touch with the work throughout. In the studies leading up to the approval of the section of the Highway Plan dealt with in this report, one of the first groups gathered together was a committee of city engineers.

CITY ENGINEERS' COMMITTEE

The function of this group was to advise as to engineering features and conditions incident to the formulation of the Plan. Each city engineer advised as to special local aspects in the area under his jurisdiction. Collectively, the group passed upon the general treatment, and were consulted where two cities were unable to reconcile their viewpoints as to some problem of alignment common to both. These men, accustomed in their daily work to dealing with similar problems, have contributed, at their bi-weekly meetings, a tremendous amount of thought and effort to the engineering aspects of the Plan. Their approval of the final maps is an indication that the Plan is based on proven engineering practices.

UNOFFICIAL AGENCIES ENCOURAGED

In addition there are many organizations, which although not official or endowed with governmental authority, nevertheless represent the finest type of civic spirit. These have been of great assistance in the work of preparing a practical plan. Local chambers of commerce, civic and improvement associations, representatives of public utilities and many individuals have rendered and are continuing to render indispensable services. The Commission has simply endeavored to coordinate their efforts, and to make use of the information available through them in perfecting the details of the Highway Plan.

CITY AND COUNTY ENGINEERS' ASSOCIATION

A further technical contribution to the scientific study of planning problems in the region is being made by the City and County Engineers' Association, which was formed on July 13, 1923. The constitution of this association provides that it is to act as a technical advisory body to the Regional Planning Commission. Its membership is made up of all the city and county engineering executives, and their principal assistants. It is these men who, in the final analysis, are charged with the responsibility of carrying out the Highway Plan. This association thus constitutes one of the main pillars which give substantial and intelligent support to planning in the County. Through special committees, it has conducted inquiries into special problems from time to time, seeking standards of procedure to stabilize community development from an engineering standpoint. It brings to the Commission the collective experience of its members with regard to subdivision regulation, methods of spreading assessments, proper street and roadway widths, and many other matters.

ASSOCIATION OF CITY PLANNERS

An equally important organization, less technical, but affording a wider opportunity for the exchange of city planning ideas, experiences and conclusions is "The Association of City Planners of Los Angeles County". This organization, since its inception in 1924, has held regular monthly meetings, each time in a different community. Its membership is made up of city councilmen, members of city planning commissions, city engineers, city attorneys, park superintendents, mayors and other officials and individuals interested in city planning. The Association was established to serve as a clearing house of planning information, and it has become a significant factor in the correlation of city, county and state planning activities. It has also been a useful means of contact for the Regional Planning Commission, and a force in securing official recognition of the value of planning.

LEAGUE OF CALIFORNIA MUNICIPALITIES

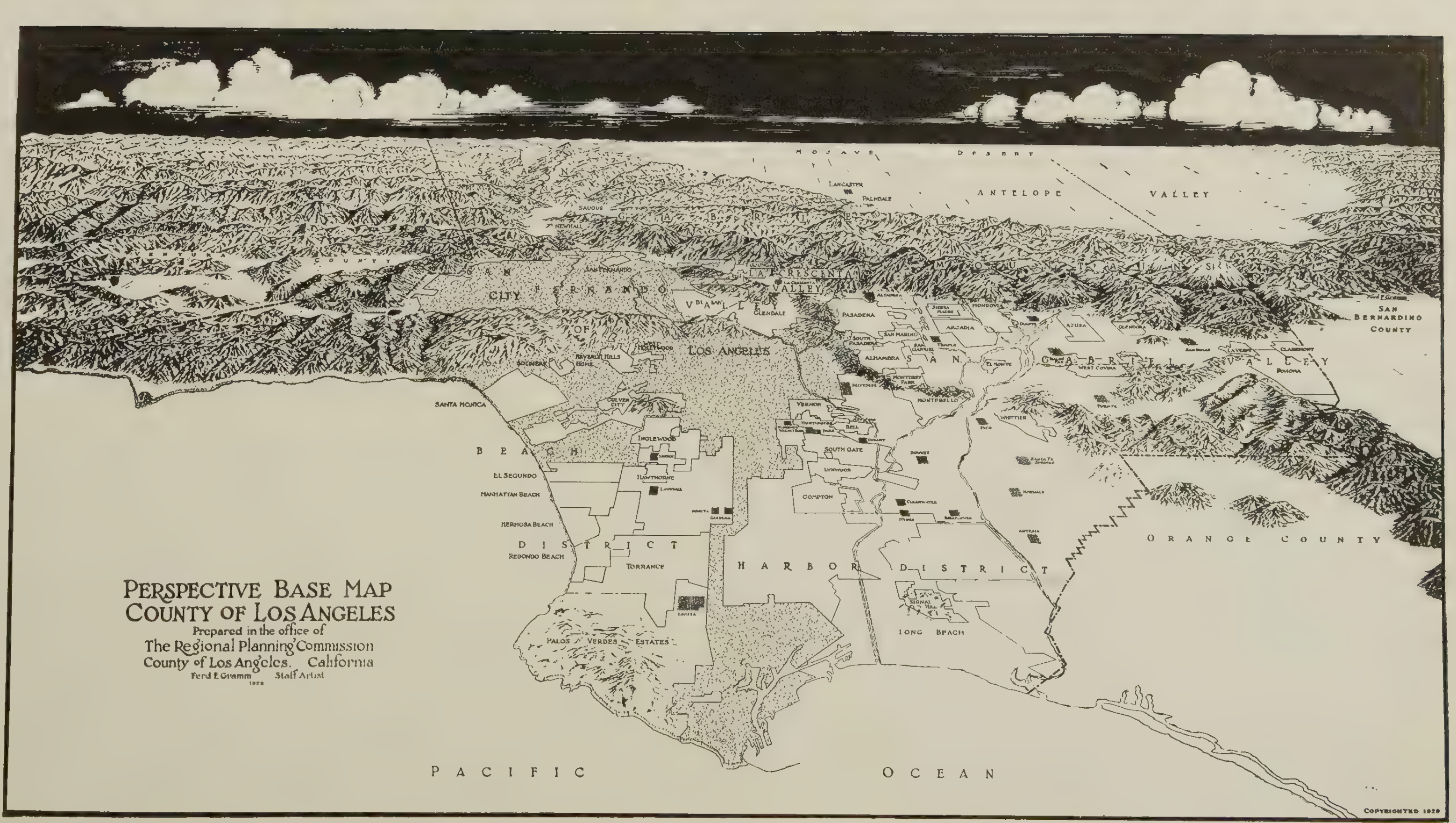
A state-wide organization which has played a large part in the development of the legal background for the planning movement is the League of California Municipalities. This organization, through its Planning Section, has offered the best means of securing State legislation, without which it would be difficult to carry out any planning program, however well developed. At the annual conventions of the League, the special problems of city councilmen, city clerks, assessors, park superintendents, street superintendents and water supply and sanitation specialists are studied by this Section, from an entirely new angle, with results equally valuable to themselves and to the city planning movement.

THE COUNTY'S INTERDEPARTMENTAL COMMITTEE

The final application of any part of the Regional Plan of Highways is quite evidently an engineering problem. It was found that within the County itself, there were three distinct types of engineering work being done; namely, Planning, Surveying and Construction. A final touch was therefore added in the matter of coordination when this office took the lead in the establishment of an Interdepartmental Committee, representing the County Surveyor's Department, the County Road Department and the Regional Planning Commission. This Committee meets every week in the office of the Planning Commission, and provides an excellent opportunity for the engineering executives of these three departments to understand and appreciate each other's problems. Whenever specific problems come up for discussion, they are considered in detail as to engineering features, proper assessment district limits and correlation to the Regional Plan as a whole. As a result, the engineering work of the County is on a more substantial basis, there is a better sense of that mutual understanding which is so essential, and current projects are being undertaken and completed with fewer errors and less duplication of effort.

RELATION TO THE GENERAL PUBLIC

A special effort has been made to keep the work of the Regional Planning Commission in complete harmony with that of the State Highway Commission, the State Railroad Commission, the Automobile Club of Southern California, the City Managers' Association, and the various public utility corporations. Each of these has been found receptive to the principles of planning, having already learned the value of exercising foresight in its own work. The general public has been constantly kept informed as to the progress of the Plan, through the maps which are always available for consultation at the office of the Commission, and through the visual presentation of special projects and studies. It is with such a purpose in mind that we have prepared at this time a summary of the progress which has been made on the Regional Plan of Highways for the San Gabriel Valley, together with a brief statement of the problems involved and the methods used for their solution.



PERSPECTIVE BASE MAP
COUNTY OF LOS ANGELES
Prepared in the office of
The Regional Planning Commission
County of Los Angeles. California
Ferd E. Gramm Staff Artist
1929

II. THE SAN GABRIEL VALLEY HIGHWAY PLAN

RELATION OF PRESENT REPORT TO REGIONAL PLAN

Before proceeding to the actual subject matter, a brief statement of the relation which the present report bears to the Regional Plan as a whole seems in order. With over 4,000 square miles of hill and valley lands, some already intensively used, and others almost unoccupied, the process of determining the wise locations for all the highways, parks, and residential and industrial districts of the future and the relative areas needed for each, is a huge task. Conclusions must be based upon thorough fact-finding surveys made in logical succession.

HIGHWAY NETWORK OF BASIC IMPORTANCE

The Major Highway system is the primary element in a Regional Plan—one which is fixed in extent by the calculable demands to be placed upon it, and often partially determined as to location by topographical conditions or by established dedications. The broad outlines of the Regional Plan of Highways have already been set forth on the Commission's maps, and have been subject to continuous refinement through field and economic studies for the past five years.

NECESSITY OF PROCEEDING BY SECTIONS

The great size of the area under study, and the limitations placed on working-drawings by considerations of size and scale, led to the decision to divide the County more or less arbitrarily into districts, keeping as nearly as possible to the following natural geographic divisions:

1. San Gabriel Valley
2. La Crescenta Valley
3. San Fernando Valley
4. Antelope Valley
5. San Gabriel Mountain Range
6. Los Angeles Harbor District
7. Pacific Coast Beach District

The map opposite shows these geographic divisions. Each has its distinct problems, but all are inseparably bound together by common interests.

Base maps for these districts have been drawn, to a scale of 1000 feet to the inch, and with their aid, highway studies are proceeding in every section of the County. While the work of detailing a particular section is going forward, the foundation is being laid for subsequent studies in each other section.

SECTION 2-E FIRST TO BE COMPLETED

Section 2-E, the San Gabriel Valley, is the first district to be completed in detail as to highway plan. The Map Insert shows the Regional Plan of Highways for this area, as finally approved by all official agencies concerned. This area is well suited to serve as a demonstration of the need and value of a unified network of major and secondary highways.

DESCRIPTION OF THE SAN GABRIEL VALLEY

The San Gabriel Valley is beautiful and productive. It is bounded on the north by the San Gabriel Mountain range; on the south by the Montebello and San Jose hills; on the west by the San Rafael hills, and on the east by the easterly boundary line of the County, which follows approximately the line of the San Antonio Wash. The eastern end of the County is largely agricultural in character, containing many fine citrus groves, while the western end approaches a more nearly urban character in proportion to its nearness to the City of Los Angeles, the metropolitan center. Only twenty percent of its area is at present subdivided into town lots, while nearly forty percent is still entirely unoccupied.

AREA AND TOPOGRAPHY

Area of hills	15	square	miles
Area of washes and rivers	20	"	"
Area devoted to agriculture	80	"	"
Total area	278	"	"

CITIES AND TOWNS

There are seventeen incorporated cities in the Valley with a combined area of 92.41 square miles, and fourteen unincorporated towns with a combined area of approximately 25 square miles. The table on the next page gives the present population of each of the incorporated cities and its assessed valuation, together with some figures as to ultimate anticipated population and future paving needs, which are referred to in another section of this report.

INCORPORATED CITIES

Alhambra
Arcadia
Azusa
Claremont
Covina
El Monte
Glendora
La Verne
Monrovia
Monterey Park
Pasadena
Pomona
San Gabriel
San Marino
Sierra Madre
South Pasadena
West Covina

UNINCORPORATED TOWNS

Baldwin Park
Bassett
Duarte
East City Terrace
Garvey
Lamanda Park
Michillinda
Potrero Heights
Repetto
Rosemead
San Dimas
South Santa Anita
Temple
Wilmar

ENGINEERING FACTORS IN HIGHWAY PLAN

The detailed study of the highway and vehicular problem in the San Gabriel Valley was begun in 1925. At the outset it was determined to give full consideration to all the engineering factors involved and to the proper correlation of the Highway Plan to other phases of planning work. There are a number of engineering factors which influence highway design, and these have been considered, not separately, but in relation to one another. Some of the more important ones will be referred to in detail on the following pages.

POPULATION - PAVEMENT - AUTOMOBILES

SAN GABRIEL VALLEY

City	Area (Square Miles)	Population		Assessed Valuation	Square Feet of Pavement on Through Streets			Persons per Automobile
		Present	Ultimate		Present	*	Ultimate (as Planned)	
Alhambra	6.20	33,650	100,000	$26,091,000	2,400,000	60	9,720,000	3.50
Arcadia	9.70	6,800	150,000	8,500,000	400,000	20	13,867,000	3.50
Azusa	4.06	7,000	74,000	2,579,000	530,000	30	5,440,000	3.50
Claremont	3.33	3,500	25,000	3,087,000	300,000	20	5,306,000	4.00
Covina	0.86	5,000	13,800	2,213,000	400,000	20	1,600,000	3.50
El Monte	1.14	4,500	18,200	2,233,000	380,000	100	1,929,000	3.50
Glendora	2.18	4,600	35,000	2,099,000	395,000	50	3,357,000	3.50
La Verne	1.25	2,800	18,000	1,685,000	290,000	5	2,321,000	3.75
Monrovia	7.91	13,000	80,000	10,959,000	1,200,000	75	6,348,000	3.50
Monterey Park	5.00	8,000	70,000	4,436,000	680,000	50	5,585,400	3.50
Pasadena	17.70	83,500	300,000	181,791,000	6,000,000	80	24,119,900	3.00
Pomona	12.50	25,660	200,000	16,254,000	2,000,000	50	18,632,000	3.50
San Marino	3.50	2,500	35,000	10,696,000	201,000	30	3,100,000	2.70
San Gabriel	3.00	6,000	48,000	5,698,000	480,000	25	5,453,000	3.75
Sierra Madre	2.94	6,000	47,000	3,758,000	460,000	10	2,467,200	3.50
So. Pasadena	3.14	15,000	50,000	14,715,000	1,400,000	25	2,786,800	3.25
West Covina	8.00	800	128,000	2,628,000	40,000	1	8,958,400	3.50

*Figures in this column indicate percentage of present capacity used under peak-load conditions.

POPULATION TRENDS AND HIGHWAY DESIGN

The foremost consideration is the matter of population, for in designing a highway system, just as in designing a water system or any other general utility service, the basic requirement is a correct estimate of population density, present and future. Without such an estimate, they could neither arrange for needed extensions, nor calculate the earning power upon which their financial structure depends. With this information, money can be spent where it will do the most good, and equipment can be located to the best advantage. It cannot be expected that rapid transit or telephone lines will be extended without accurate information as to the population density of the district to be served. A certain telephone company discovered recently that the location of a central station serving 7500 subscribers, only one-half mile *away* from the center of population, would involve additional expenditure for equipment sufficient to justify an increase in the rates to subscribers of 76 cents per month. Regional Planning aims to accomplish for the community as a whole what these utility corporations are finding necessary in their own work; namely, to establish a carefully worked out plan for future development, based upon accurate information as to population trends. In designing a water system, the engineer first determines the total amount of water consumed by the present population of the area to be served. From this he calculates the average amount of water consumed by one person per day. Then, by a study of the factors affecting population density in the area, he is able to design the necessary reservoirs, pumps, transmission and lateral mains to serve the probable ultimate population. Street and highway systems can and should be designed on much the same basis. There are five factors involved in determining the area of paved highway needed for the safe and efficient movement of motor vehicles in a given community:

1. Area of the district to be served.
2. The percentages of the area which are to be devoted to the several types of use.
3. The ratio of population density to area resulting from these various types of use.
4. Ratio of automobiles to total population.
5. An estimate of the proper ratio of the paved street area to the number of motor vehicles.

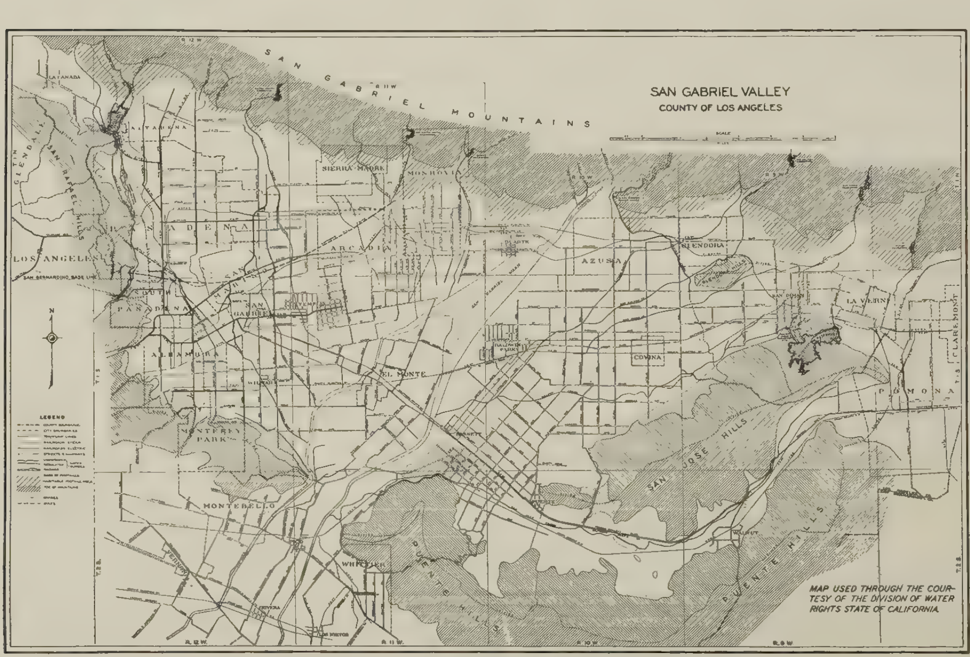
All these factors can be calculated, and together they can be used as a means of determining the highway needs of the area.

SEGREGATION OF OPEN AREAS

Taking these matters up in order, it is first to be noted that there are certain areas, which by their very nature are not fit or intended to support a residential population. Two types of "open" areas will be found:

1. Mountainous or very hilly lands, forest reserves, river bottoms or washes, swamps, and the like.
2. Parks, flying fields, golf courses, cemeteries, playgrounds, and large public building sites.

The percentages of such lands in the district under study must be ascertained and allowed for in calculating the ultimate population densities. The location of these necessary open spaces also has a direct effect upon the alignment of highways which must neither interfere with them unduly, nor be made too indirect by them.

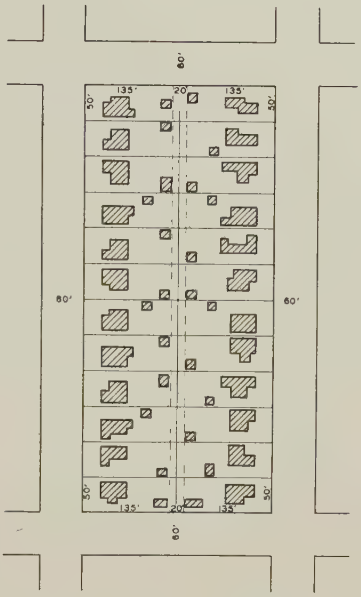


MAP USED THROUGH THE COURTESY OF THE DIVISION OF WATER RIGHTS STATE OF CALIFORNIA

STATE WATER RIGHTS MAP OF THE SAN GABRIEL VALLEY

ALLOCATION OF PROPERTY USES

It is extremely important in planning to decide upon an intelligent and complete allocation of the various uses to which property is to be devoted. A study has therefore to be made of the remaining lands with reference to their probable uses. When this has been completed, the density of the future population can be estimated, for statistical information and surveys made have shown the definite relationships that exist between the population density and the various uses of land. Some of the more important ratios which have been worked out are shown below:

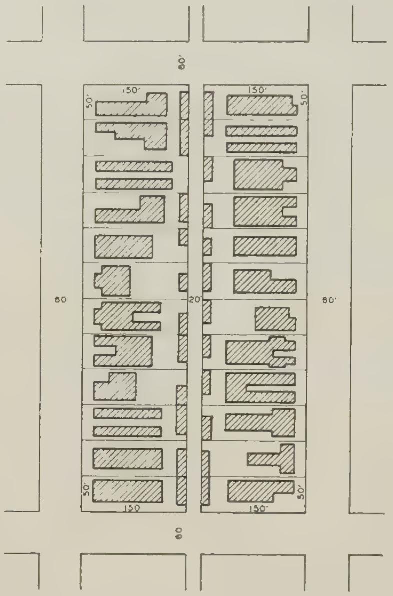


SINGLE FAMILY DISTRICT
TOTAL POPULATION 72
POPULATION PER ACRE 15
PERCENT IMPERVIOUS . 23

RELATION OF POPULATION DENSITY TO PROPERTY USES

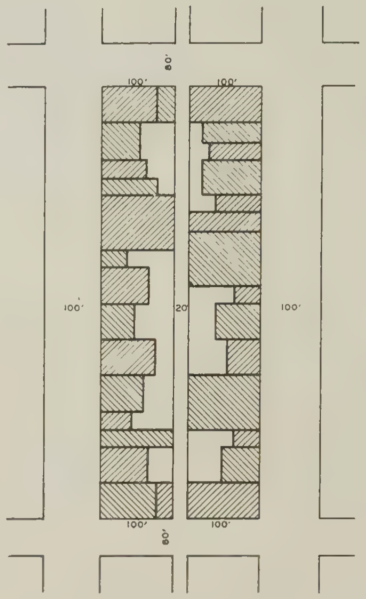
PROPERTY USE	PERSONS PER ACRE
Apartment House	80
Average Industries	10
Light Commercial	30
Single-family Dwelling	15

When these uses are predetermined and regulated by ordinance, as they should be in the interest of efficient and orderly community growth and progress, it is possible to calculate the probable maximum population that will ultimately occupy the given area, or any of its parts. Such regulation by ordinance, commonly called zoning, is of great value, too, in guiding community growth in an orderly manner, as will be pointed out in other portions of this report.



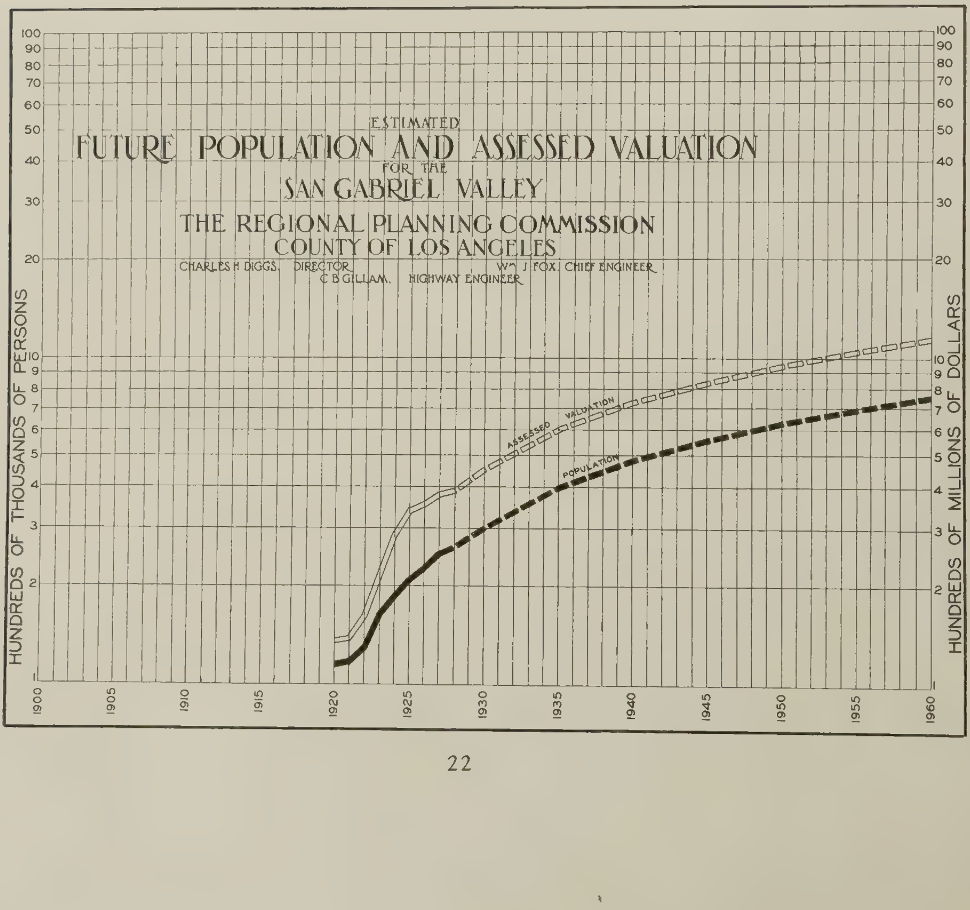
APARTMENT HOUSE DISTRICT

TOTAL POPULATION 480
POPULATION PER ACRE 80
PERCENT IMPERVIOUS 45



LIGHT COMMERCIAL DISTRICT

TOTAL POPULATION. 140
POPULATION PER ACRE............30
PERCENT IMPERVIOUS.......... 75

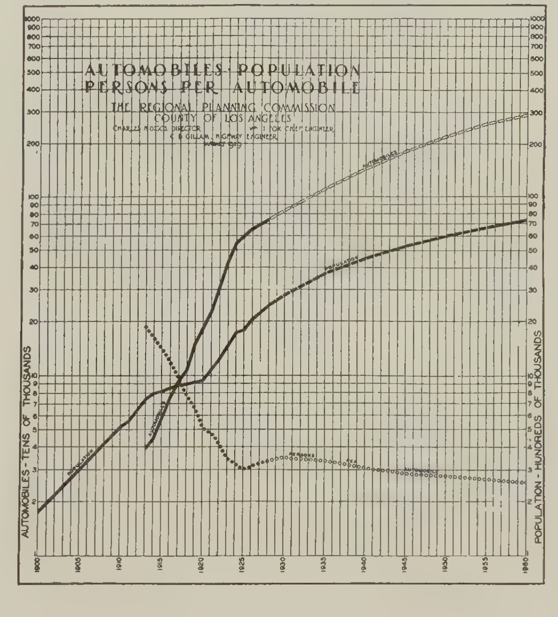


PROBABLE ULTIMATE POPULATION

The figures for the population growth of the San Gabriel Valley as a whole have been compiled as far back as figures were available, and plotted on a logarithmic chart, shown opposite. It was then possible, by projection, to determine the probable future population of the whole area for a period of fifty years, assuming present trends to continue in effect. These figures, together with the study of the topography and reasonable land uses just outlined, offer a valuable check on the population estimates determined and on the correctness of the allocation of land. Together they offer the means of predicting with a fair degree of accuracy the number of people who will be using motor vehicles in the San Gabriel Valley during the next half century.

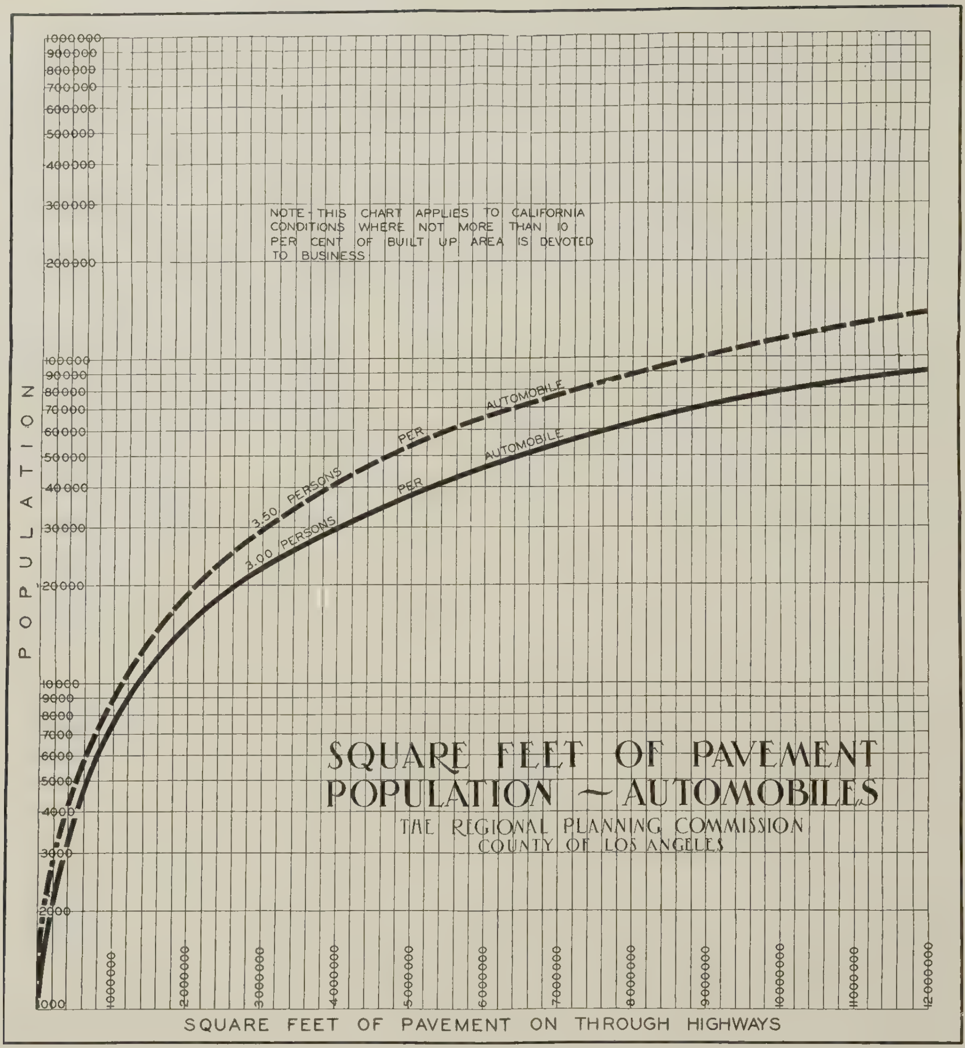
AUTOMOBILE DENSITY INDEX

On the same logarithmic chart as the population curve should also be plotted a curve indicating the actual automobile registrations for this area. This curve can be projected into the future by the same method as that used for the anticipated population. From a study of these two curves, a third curve, called the automobile density index, may be derived, as shown in the cut.



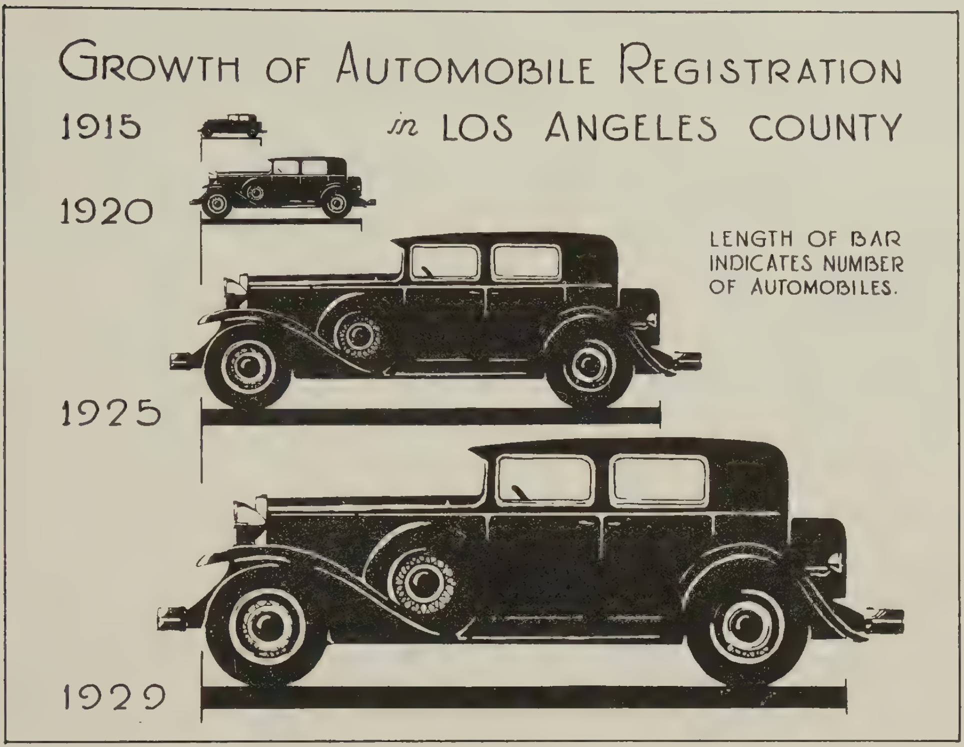
PAVED STREET AREA REQUIRED

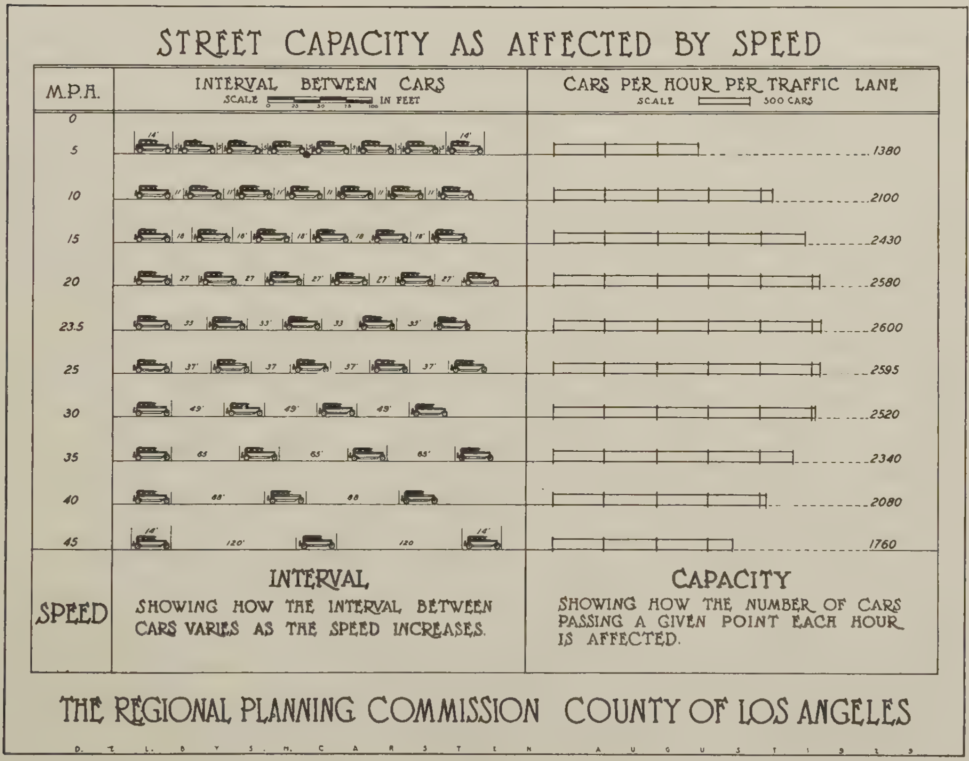
Setting aside for the moment aesthetic values and other considerations, the requirement of any community as to paved area is a function of the number of automobiles operating in the district. It has just been shown that there is a definite relationship between automobiles and population. Experiment has also shown that there is an equally definite relationship between the number of automobiles in a given area and the amount of paved street area required, on through highways and major streets, for the safe and efficient movement of traffic. As is usual in design, peak loads were taken as the controlling factor in working out the diagrams shown, which indicate the result of studies made along these lines.



VOLUME OF TRAFFIC FLOW

The conclusions thus reached have been verified and strengthened by the study of general statistics as to the development of the automobile industry and the ability of the people to continue to purchase and maintain automobiles. The drawing on the opposite page shows in a graphic manner the rapidity with which motor vehicle traffic has increased during the last decade. In California this year, the registration of automobiles is 1,829,759, of which 719,879 are in Los Angeles County. The average speed maintained, too, has its effect on street capacities, and this relationship has been the subject of special studies by this department.


GROWTH OF AUTOMOBILE REGISTRATION in LOS ANGELES COUNTY
1915
1920
1925
1929
LENGTH OF BAR INDICATES NUMBER OF AUTOMOBILES.


STREET CAPACITY AS AFFECTED BY SPEED
M.P.H.
INTERVAL BETWEEN CARS
SCALE 0 25 50 75 100 IN FEET
CARS PER HOUR PER TRAFFIC LANE
SCALE 500 CARS
0
5
14'
5
14'
1380
10
11
2100
15
18'
2430
20
27'
2580
23.5
33'
2600
25
37'
2595
30
49'
2520
35
65'
2340
40
88'
2080
45
14'
120'
14'
1760
SPEED
INTERVAL
SHOWING HOW THE INTERVAL BETWEEN CARS VARIES AS THE SPEED INCREASES.
CAPACITY
SHOWING HOW THE NUMBER OF CARS PASSING A GIVEN POINT EACH HOUR IS AFFECTED.
THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES
DEL. BY S. M. CARSTEN AUGUST 1929

SAFETY PROVISIONS

When the actual amount and proper distribution of the paving needed have been worked out, the detailed design of the alignment of the individual highways is the next problem. Here considerations of safety are of paramount importance. This means provision for long, unobstructed view, or ample sight distance; the elimination of sharp curves and dangerous grades, and a careful study of intersections.

SIGHT DISTANCE AND HIGHWAY DESIGN

A substantial contribution to the protection of the careful driver from the careless one is the provision for long unobstructed views or adequate "sight distance" in the design of our modern highways. The matter of "stopping distance", however, is very closely related to the sight distance factor. A motor vehicle operator, to be called a "safe driver", must operate his car at such speed that it can be stopped within the distance that is sure to be free from obstruction. There are several factors on which the stopping distance depends: the speed of the car, the surface of the road, the condition of the pavement and the reaction time of the driver.

STOPPING DISTANCE

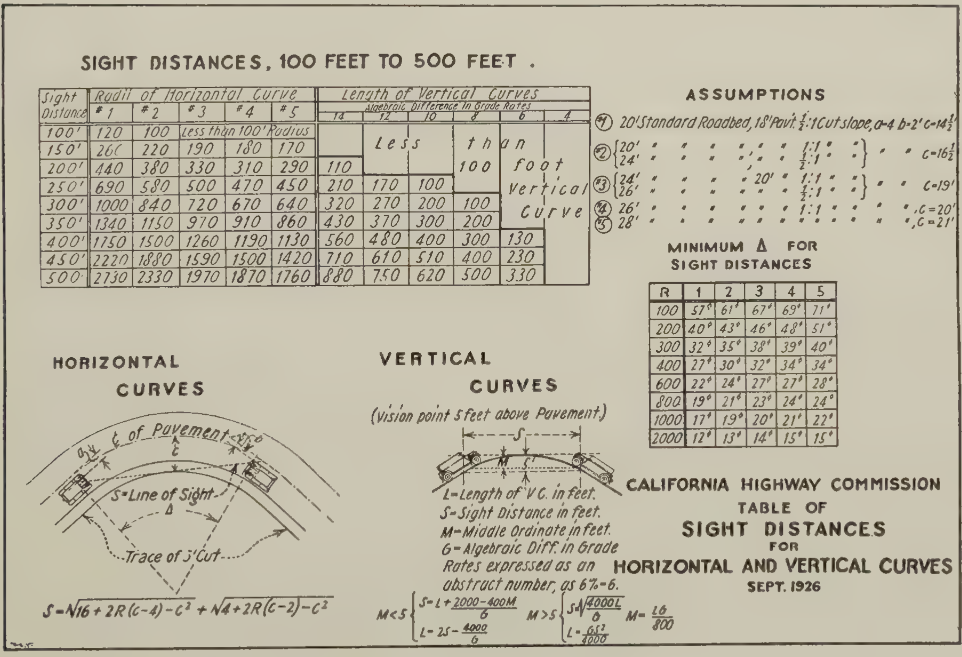
A definite relation can be stated between the speed of a car and the stopping distance under certain conditions. In the following tabulation are shown the rate of speed in miles per hour and in feet per second, the stopping distances in feet for two-wheel and four-wheel brakes, published by the Thermoid Rubber Company, and stopping distances from an actual test with a two-wheel brake car. The stopping distances are from the time

DISTANCE REQUIRED TO STOP AN AUTOMOBILE

Miles per Hour	Feet per Second	*2 Wheel Brakes**	*4 Wheel Brakes**	Actual Test**
10	14.66	9.2	6.17	9.0
15	22.00	20.8	13.9	......
20	29.33	37	24.7	34.9
25	36.66	58	38.6	53.6
30	44.00	83.3	55.5	74.4
35	51.33	113	75.6	......
40	58.66	148	98.7	135.5
45	66.00	187	124.9	......
50	73.33	231	154	178.0

*From Thermoid Rubber Company Chart. ** With brakes in proper adjustment.

the brakes are applied until the car comes to a full stop. The prescribed conditions are a dry, level road and a uniform deceleration from a known to a zero velocity. The spirit of competition which exists between manufacturers has made it necessary that such an important function as the ability of an automobile to stop in a minimum distance for any given speed be kept on a par with that of other cars in the same class. Otherwise great sales resistance would be encountered. As a result the braking qualities of cars are now so perfected that it can be safely assumed that, under similar conditions, there are certain maximum distances in which all automobiles can be brought to a full stop. Of course the grade of the highway, the type and condition of the pavement, whether wet or dry, must be taken into consideration in studying individual cases. The remaining factor which determines whether or not there will be a collision is the time element required, after first sighting the object of collision, to apply the brakes. This consists of two distinct parts: (1) the time in which the brain registers the impression of the object and makes a decision, and (2) the time required for the transmission of that decision to the nerves and muscles which must operate the brakes. This time varies with individuals, but the United States Bureau of Standards has found the average reaction time of persons tested to be approximately one-half second.



SIGHT DISTANCES, 100 FEET TO 500 FEET.

Sight Distance	Radii of Horizontal Curve					Length of Vertical Curves					
						Algebraic Difference in Grade Rates					
	#1	#2	#3	#4	#5	14	12	10	8	6	4
100'	120	100	Less than 100' Radius				Less than 100 foot Vertical Curve				
150'	260	220	190	180	170						
200'	440	380	330	310	290	110					
250'	690	580	500	470	450	210	170	100			
300'	1000	840	720	670	640	320	270	200	100		
350'	1340	1150	970	910	860	430	370	300	200		
400'	1750	1500	1260	1190	1130	560	480	400	300	130	
450'	2220	1880	1590	1500	1420	710	610	510	400	230	
500'	2730	2330	1970	1870	1760	880	750	620	500	330	

ASSUMPTIONS

① 20' Standard Roadbed, 18' Pavt. ½:1 Cut slope, a=4 b=2' c=14½'
② {20' " " " " " " 1:1 " " } " " c=16½
    {24' " " " " " " ½:1 " " }
③ {24' " " " " 20' " 1:1 " " } " " c=19'
    {26' " " " " " " ½:1 " " }
④ 26' " " " " " " 1:1 " " " ", c=20'
⑤ 28' " " " " " " " " " " " ", c=21'

MINIMUM Δ FOR SIGHT DISTANCES

R	1	2	3	4	5
100	57°	61°	67°	69°	71°
200	40°	43°	46°	48°	51°
300	32°	35°	38°	39°	40°
400	27°	30°	32°	34°	34°
600	22°	24°	27°	27°	28°
800	19°	21°	23°	24°	24°
1000	17°	19°	20°	21°	22°
2000	12°	13°	14°	15°	15°

HORIZONTAL CURVES

$$S = \sqrt{16 + 2R(c-4) - c^2} + \sqrt{4 + 2R(c-2) - c^2}$$

VERTICAL CURVES

(vision point 5 feet above Pavement)

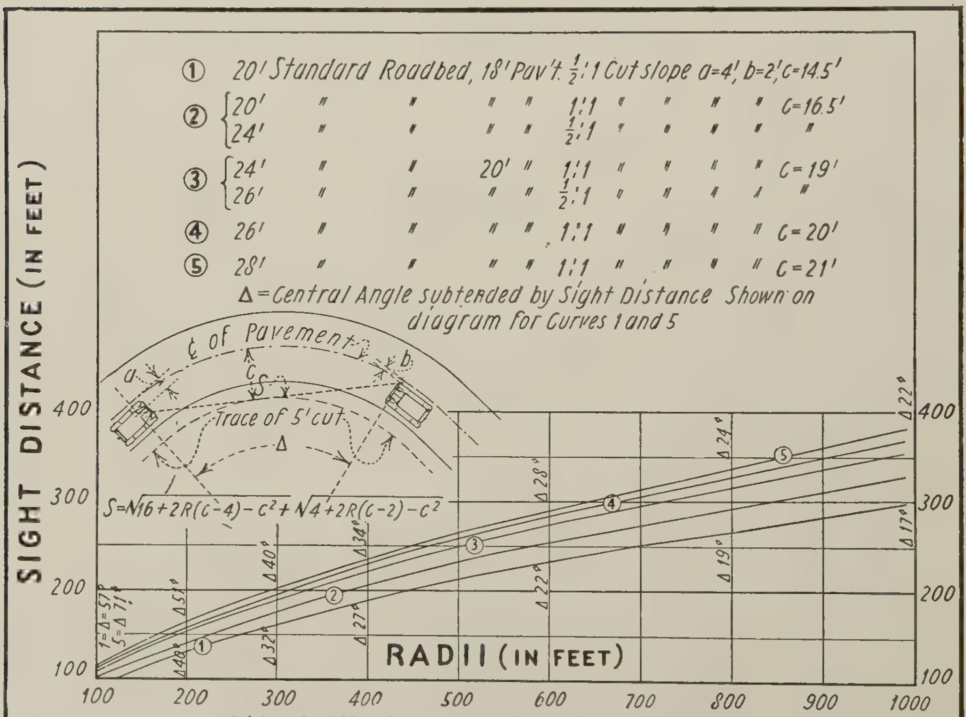
L=Length of V.C. in feet.
S=Sight Distance in feet.
M=Middle Ordinate in feet.
G=Algebraic Diff. in Grade Rates expressed as an abstract number, as 6%=6.

$$M<5\begin{cases} S = L + \dfrac{2000-400M}{G} \\ L = 2S - \dfrac{4000}{G} \end{cases} \quad M>5\begin{cases} S = \sqrt{\dfrac{4000L}{G}} \\ L = \dfrac{GS^2}{4000} \end{cases} \quad M = \frac{LG}{800}$$

CALIFORNIA HIGHWAY COMMISSION
TABLE OF
SIGHT DISTANCES
FOR
HORIZONTAL AND VERTICAL CURVES
SEPT. 1926

EFFECT OF HIGHWAY CURVATURE

In view of the fact that this reaction time is thus shown to be nearly constant, discussion will be confined to the time the driver has available in which to bring his automobile to a full stop after first sighting an obstacle. This time is a direct function of the "sight distance", and these two quantities determine the safe speed. The farther away a driver sees the object of collision the less likely he is to collide with it. For example, if he were driving on a flat section of prairie land where there were no buildings, no vertical nor horizontal curves, his vision being unobstructed to right or left or along his course of travel, there would be little danger of collision, and the safe running speed would be high. On the other hand, on a curve the view may be obstructed by embankments, buildings, trees, bushes or parked vehicles. The driver, say on a curve to the right, can see his right hand side of the road ahead for a definite distance. If in this distance he sees no obstruction, he has a clear course equal to his "sight distance", *but no more.* This sight distance constitutes the safe "stopping distance", which in turn determines the safe speed.



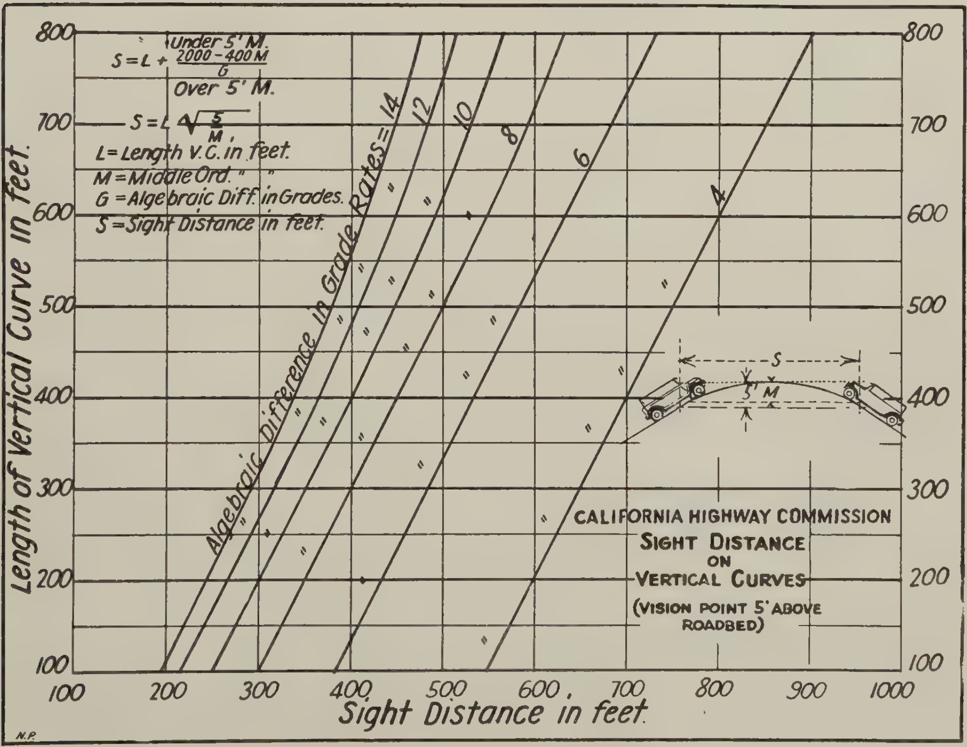
CALIFORNIA HIGHWAY COMMISSION
SIGHT DISTANCE ON HORIZONTAL CURVES.

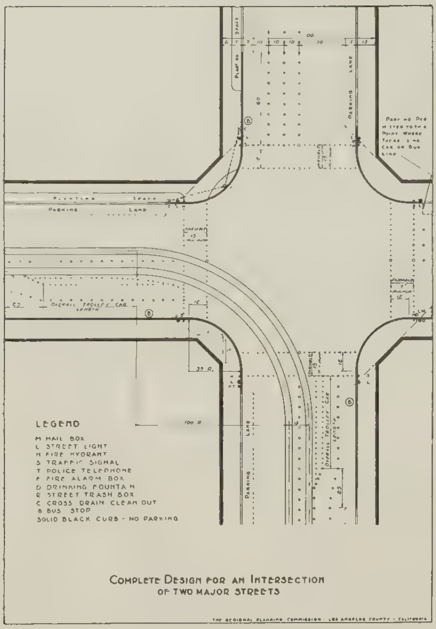
CURVES DESIGNED FOR MAXIMUM SAFETY

Disregarding for the moment the influence of other traffic conditions, it is possible to establish the relation between "sight distance" and "stopping distance", and the proper values for these factors being known, it is possible to design highways for safety at desired maximum speeds. The accompanying graphs prepared by the California State Highway Commission show for varying widths of roadway the lengths of radii on horizontal curves and the lengths of parabolic curves necessary to obtain a given sight distance, and to assure a maximum of safety for all traffic on the major highway system.

SIGHT DISTANCE AT INTERSECTIONS

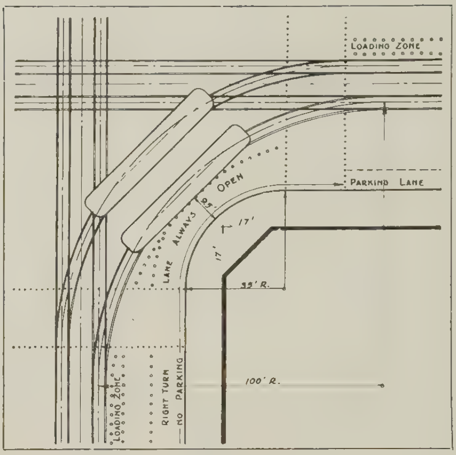
At intersections the relation between sight distance and stopping distance becomes a somewhat different problem. A driver approaching an intersection at any given speed should have a sight distance *along the cross street* sufficient to enable him to see a vehicle approaching from the right or left in time to decide to stop, apply the brakes and come to a full stop before entering the intersection. This principle has been recognized in the design





COMPLETE DESIGN FOR AN INTERSECTION
OF TWO MAJOR STREETS

THE REGIONAL PLANNING COMMISSION · LOS ANGELES COUNTY · CALIFORNIA

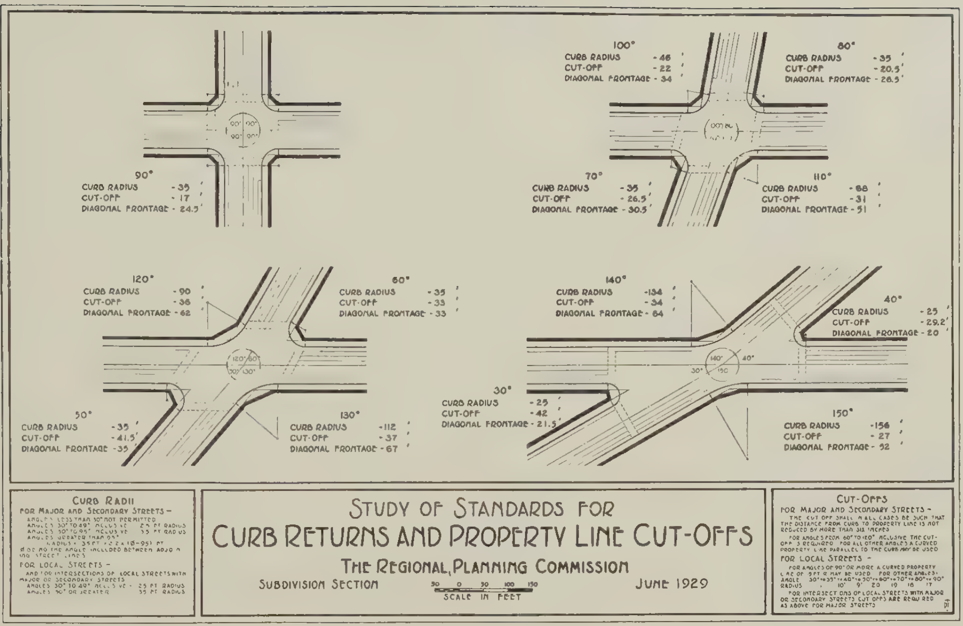


The corner cut-off allows for economic design of culverts and cross-drains, increases visibility and permits a large radius at the curb which expedites traffic. Where street cars turn, greater safety is attained, as one lane of traffic is continuously clear.

of intersections in Los Angeles County. Experience has demonstrated the value of discarding the square corner for properties at street intersections. The change from this obsolete custom has added to the safety of intersections because of better visibility. It likewise has permitted advantageous architectural treatment for business properties at street intersections. But the most important factor of corner treatment is the added element of safety and expeditious movement of traffic.

PRESENT PRACTICE OF CORNER TREATMENT

Experiment, combined with calculation, has defined the most reasonable and effective treatment for street intersections of varying widths and angles. Streets now being developed have the block corners cut back either on curves or on diagonal lines so as to afford the proper sight distance for cars travelling under control at reasonable speeds. It would be economically impossible to provide by this means so large a sight distance at corners that cars travelling at speeds usual on the open highways would be given the necessary stopping distance. As may be seen in the table of stopping distances above, a car travelling at forty miles per hour, for example, requires a distance of from 100 to 150 feet in which to stop besides approximately 30 feet travelled during the time occupied in reaction and decision by the driver. To supply sufficient sight distance in this case it would be necessary to cut the corner back so far that the intersection would become too large and even dangerous.

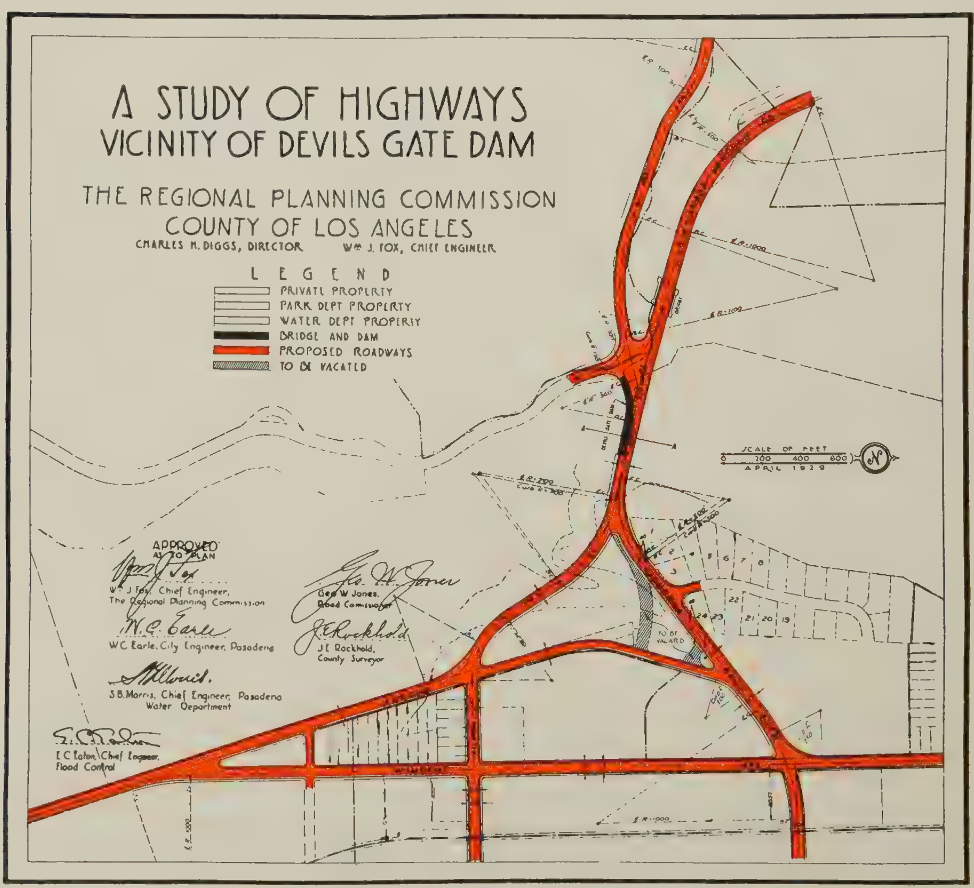


STANDARDS FOR CORNER TREATMENT IN SUBDIVIDED AREAS

Intersections of fully improved streets presume some degree of urban development and reasonable speed for vehicles. Accordingly, standards for corner treatment in built up sections are based upon the assumption that in approaching a corner the speed of cars will be reduced to from 20 to 30 miles per hour (depending upon the braking performance of the individual car) until reaching the point where the proper sight distance is gained. At this point and at these speeds the driver will have sufficient time and distance to make his decision and to stop if necessary, or to proceed without further loss of time. In the case of intersections at acute and obtuse angles, illustrated above, economic factors and questions of traffic flow must be considered in addition to the "sight distance". The latter usually being ample in the nature of the case, these other factors are found to have sufficient weight to modify the requirements considerably. All of these matters have been given the most careful study by the Commission, and resulting conclusions have been embodied in the regulations for land subdivision and in proceedings for the opening and widening of highways. It frequently occurs however that an intersection including more than two highways, or one involving a bridge, a separation of grades or some other special difficulty, must be made the subject of study and design as an individual problem.

INTERSECTION STUDIES

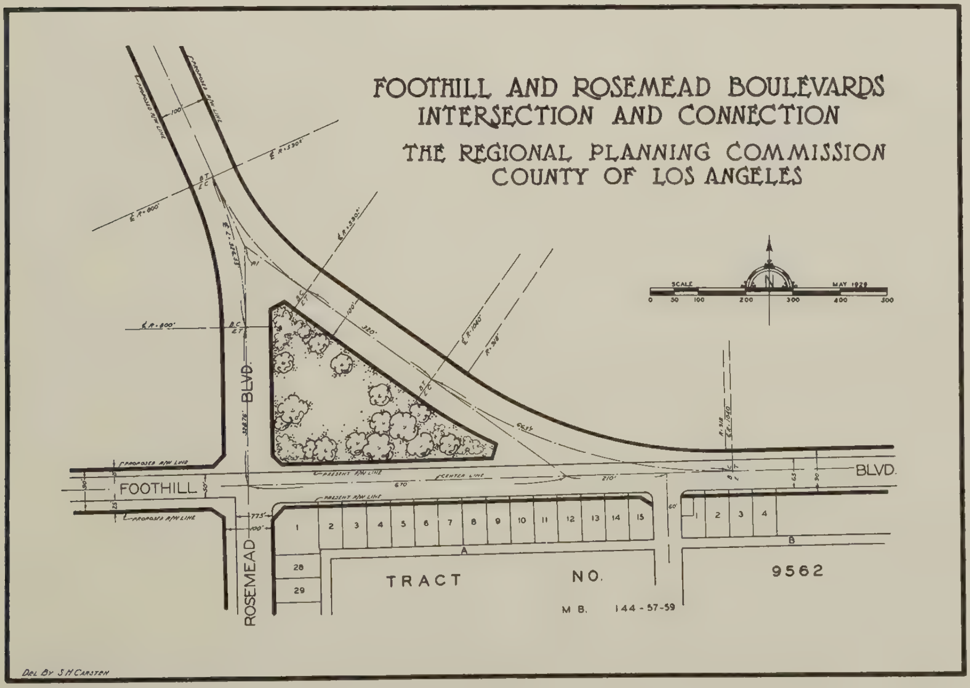
As the Highway Plan is developed, detailed studies are made of all complicated intersections. This involves an analysis of traffic movements and the effect on property values, as well as consideration of safety. Wherever any proposed highway is so located as to cut through private property, an effort is made to fix the alignment so as to provide for the best use of the remaining parcels of land. The accompanying drawing shows such a study made in the vicinity of Devil's Gate Dam, northwest of Pasadena. This was a difficult highway and traffic problem, and there has been congestion at this point for a number of years. The topography indicates the location of the dam itself as the best site for a bridge of adequate width. The division of jurisdiction between the County, the City of Pasadena, the Flood Control District and the City of Pasadena Park and Water Departments added further complications to those resulting

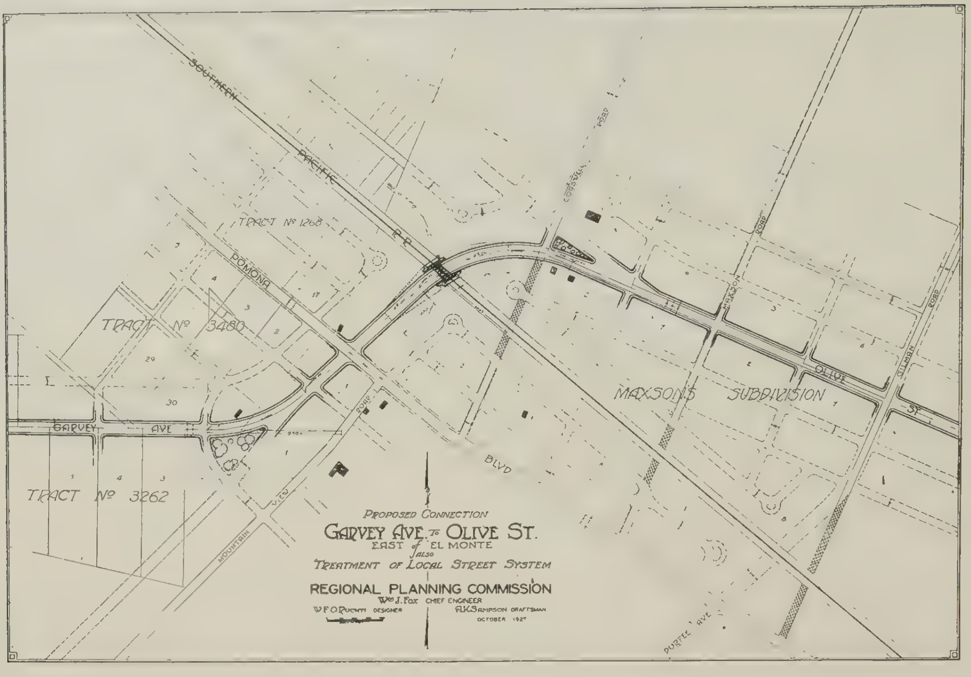

A STUDY OF HIGHWAYS
VICINITY OF DEVILS GATE DAM
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
LEGEND
PRIVATE PROPERTY
PARK DEPT PROPERTY
WATER DEPT PROPERTY
BRIDGE AND DAM
PROPOSED ROADWAYS
TO BE VACATED
SCALE OF FEET
0 200 400 600
APRIL 1929
N
TO BE VACATED
APPROVED AS TO PLAN
Wm J. Fox
Wm J Fox, Chief Engineer, The Regional Planning Commission
W. C. Earle
W C Earle, City Engineer, Pasadena
S B Morris
S.B.Morris, Chief Engineer, Pasadena Water Department
E C Eaton
E C Eaton, Chief Engineer, Flood Control
Geo. W. Jones
Geo W Jones, Road Comissioner
J E Rockhold
J E Rockhold, County Surveyor

from the diversity of private ownership. This problem was taken up from a strictly technical point of view, and when a satisfactory solution had been found, it was presented to the various jurisdictions for their approval.

ROSEMEAD BOULEVARD ANOTHER EXAMPLE

Another example of an entirely different type is illustrated below. This is the intersection of two major highways. Foothill Boulevard, a State highway, is an important east-west artery of traffic, while Rosemead Boulevard, now being developed, will have considerable importance as a north-south line. The problem here was to provide for the deflection of a considerable portion of the traffic coming westerly along Foothill Boulevard to the north over the proposed extension of Rosemead Boulevard so as to pass through Altadena on the Foothill Boulevard there, and thence across the Arroyo Seco into Michigan Boulevard in La Crescenta Valley. Michigan Boulevard is also a State highway. This deflection will permit free movement of travel from San Bernardino and the east to the Ridge Route and points north in a much more direct manner than is possible at present, by-passing areas of traffic congestion. In this case, too, the solution has been presented for approval to all concerned.





VALUE OF THIS METHOD

Similar methods were followed in the design of the underpass of Garvey Avenue, east of the City of El Monte. In fact, the entire Regional Plan of Highways is being developed upon the basis of such studies as these. The Plan in its finished form, although seemingly general in its nature, is in reality very carefully detailed throughout. In many cases, instrument surveys have been made, to determine exact locations. But the greatest emphasis has always been placed upon the importance of properly correlating project with project, so as to develop plans for an adequate system of highways, with due regard for property rights; and to secure for it the approval of all interested parties. This procedure typifies the methods of the Commission, and has been found to build up a spirit of harmony. While the Plan as a whole is of benefit to the community, the information it conveys to all interested parties is of special value, as it permits them to develop their respective holdings more safely and more effectively.

CORRELATION WITH OTHER PHASES OF PLAN

On the foregoing pages, some of the more technical engineering problems involved in highway design have been briefly outlined. These by no means complete the story, nor could a highway plan that would stand the test of time be based upon these considerations alone. The highway system is only one of the several elements which make up a comprehensive Plan. It is therefore vital to the effectiveness of the Highway Plan that it be studied at all times in relation to each of the other elements. For example, it must be developed in cadence with the plans for parks and parkways, zoning and the regulation of new subdivisions. It must be properly correlated to the provision made for other means of transportation, such as rapid transit lines, railroad lines and airports. All these facts have been kept constantly in mind in the preparation of the Regional Plan of Highways for the San Gabriel Valley.

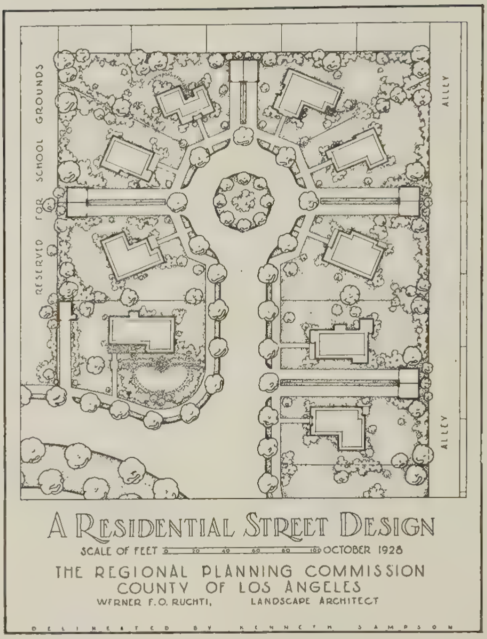
THE HIGHWAY PLAN AND THE SUBDIVISION OF LAND

When the subdivision of land is properly done, the results are of lasting benefit to all concerned. When it is badly done, the damage is great and frequently almost irreparable. The subdivider, the purchaser, the utility corporations, the banks and financing companies and the public are all better safe-guarded if there be established a set of fair and workable regulations, which will govern such subdivision of land in a manner conducive to the best interests of the community. There is also a vital relationship between this and the development of the highway system.

THE CITY COMPOSED OF SUBDIVISIONS

Every city is made up of a series of subdivisions. Its character is established at the start by the type and tone of the early subdivisions, and its frame-work of streets bears the almost indelible stamp of the succession of tracts which have been added to it throughout the years. One of the first items that any planning commission must consider is the street system and how to protect and extend it effectively. The most valuable means of doing this is through the use of a carefully drawn set of regulations fo new subdivisions. This is the only way in which new additions can be made to conform with the predetermined plan of the city. These regulations must be fair and reasonable, and based throughout upon the experience and judgment of able men.

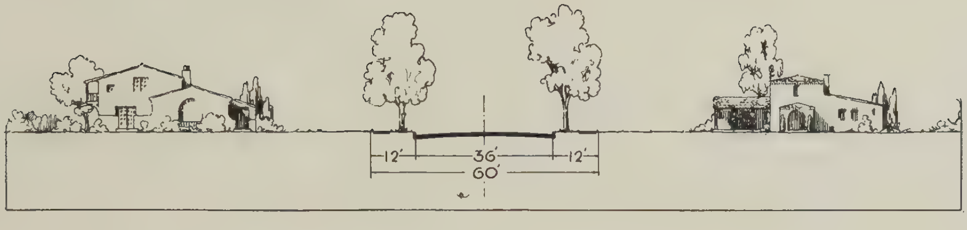
TECHNICAL ADVICE IN PREPARING REGULATIONS


RESERVED FOR SCHOOL GROUNDS
ALLEY
ALLEY
A RESIDENTIAL STREET DESIGN
SCALE OF FEET 0 20 40 60 80 100 OCTOBER 1928
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
WERNER F.O. RUCHTI, LANDSCAPE ARCHITECT
DELINEATED BY KENNETH SAMPSON

Such a set of regulations was prepared by the City and County Engineers' Association in 1923 after a considerable amount of research. The tendency toward decentralization of population, the special characteristics of our cities, lot area requirements, utility requirements, traffic needs, land values—all were given the attention of these experienced technical men. In order that the view point of everyone concerned might be embodied these regulations, they were submitted in the course of a series of conferences to groups of realtors, subdividers, subdivision engineers, financiers and architects. In this way was formulated, by the very men most closely associated with the physical development of their respective communities, a set of standard regulations well adapted for use throughout Los Angeles County.

STANDARD REGULATIONS ADOPTED

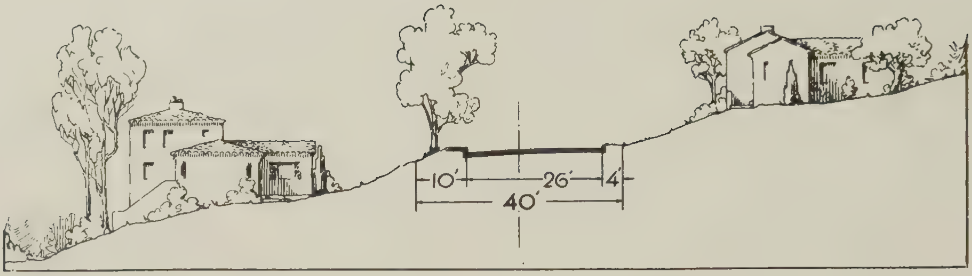
These regulations were adopted by the Regional Planning Commission and have been successfully used in connection with the 1853 tracts submitted during the past six years. That they have stood up under this very thorough test is best indicated by the general approval of them by subdividers and realtors, and by the fact that in 90 percent of the cases there has not even been a request for any exception or change in the requirements. The considerations which led to the adoption of some of the more important standards are outlined briefly on the following pages.



WIDTH OF LOCAL STREETS

The diagrammatic cross-sections at the top of this and the next three pages illustrate the standards of the Commission as to local streets, local hillside streets, secondary highways and major highways. The requirement of 60 feet as the width for local streets is based upon experience and practical necessity. Allowing 12 feet on each side for the sidewalk and planting strip, leaves 36 feet for the width between curbs, called the roadway. This is believed to be a minimum for the free and safe movement of traffic, allowing for one lane of moving vehicles in each direction, and standing vehicle against each curb. It also permits the driver to make a right turn into a driveway without swinging over to the wrong side of the street. Most such streets should be continuous, but where a particular situation requires the use of a "dead-end" street, there should be an adequate turning circle, with careful arrangement of lots and buildings, as in the case shown opposite. The attractive landscape treatment so essential to the restful atmosphere of a residential section depends equally upon effective choice and placement of street trees and upon the establishment of a uniform building line so as to allow sufficient space for proper planting in front of the houses.

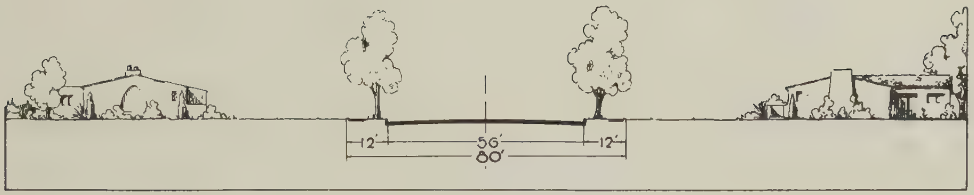
A Residential Street, Alhambra



WIDTH OF HILLSIDE STREETS

A New Hillside Street, Beverly Hills

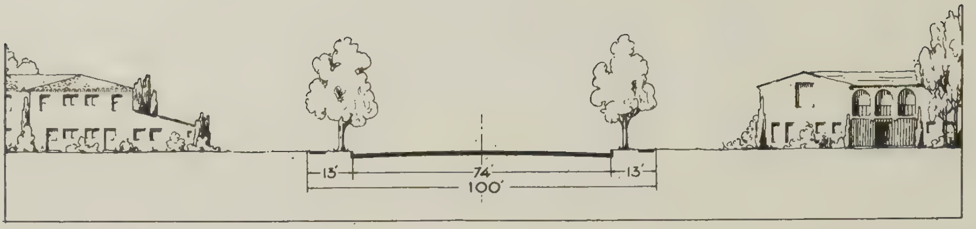
Local hillside streets are not required to be as wide, but should be at least 40 feet in width where the conditions are such as to make one sidewalk practical. A single sidewalk is usually placed on the downhill side with planting strip and space for sidewalk and lights, as shown in the sketch, and four feet is left between the curb and the property line on the other side for ornamental lights and utility conduits. Where no sidewalk is necessary, the requirement for the right-of-way may be reduced to 30 feet, but experience has shown that under no circumstances shuld the roadway be less than 26 feet. On hillside streets it is recommended that trees be planted directly on the right-of-way line. The illustration to the right shows a well-located road in hilly country as it appears before the building of the houses, and the drawing above shows the arrangement of planting, utilities, sidewalk and paved roadway in a typical cross-section.



WIDTH OF SECONDARY HIGHWAYS

In the case of secondary highways, which are designed to accommodate two moving lanes of traffic in each direction, a standard width of 80 feet is required, with a 56-foot roadway. This width between curbs provides for two 8-foot strips reserved for standing vehicles, and four 10-foot lanes for moving traffic. There will be two 12-foot sidewalk and planting strips on each side between the curb and the property line. On streets 80 feet or more in width, better and more economical service will be had if utility mains are run in duplicate, one on each side of the street. The required roadway width is of course for heavy traffic conditions, and it will be found in some cases that paving of less width will suffice for present needs. The essential thing is to provide for the full right-of-way and to plant trees and place utility mains where they will not have to be disturbed when the roadway reaches its final width.

A Secondary Highway Devoted to Residential Use, San Marino



WIDTH OF MAJOR HIGHWAYS

Major highways are designed to accommodate three lanes of moving traffic in each direction, and the right-of-way should therefore be at least 100 feet in width. In order to provide a slightly wider sidewalk and planting strip, the maximum width of roadway is placed at 74 feet. Lesser widths of paving may serve for present needs, the full amount being required only in business districts or in sections where the traffic is extremely heavy. Where the highway is bordered by residences, it is often sufficient to pave a 56-foot roadway leaving much wider strips for planting on the sides until such time as the traffic warrants the paving of the full width. Proper treatment of these strips will give the district a distinctive residential appearance and reduce traffic noise and dust. On this and the following page are several illustrations of major highways, showing various types of development. Orange Grove Avenue, in Pasadena, is beautifully developed for residential use of the highest character. Wilshire Boulevard, in the City of Los Angeles, is rapidly developing as a business thoroughfare with many fashionable shops and apartment houses. The extension of Alosta Avenue, east of Glendora, involving construction of an underpass, is being carried out by the State Highway Commission, and like Huntington Drive, Monrovia, recently completed, is an improvement link in the Highway Plan of the San Gabriel Valley.

Orange Grove Avenue, Pasaeena

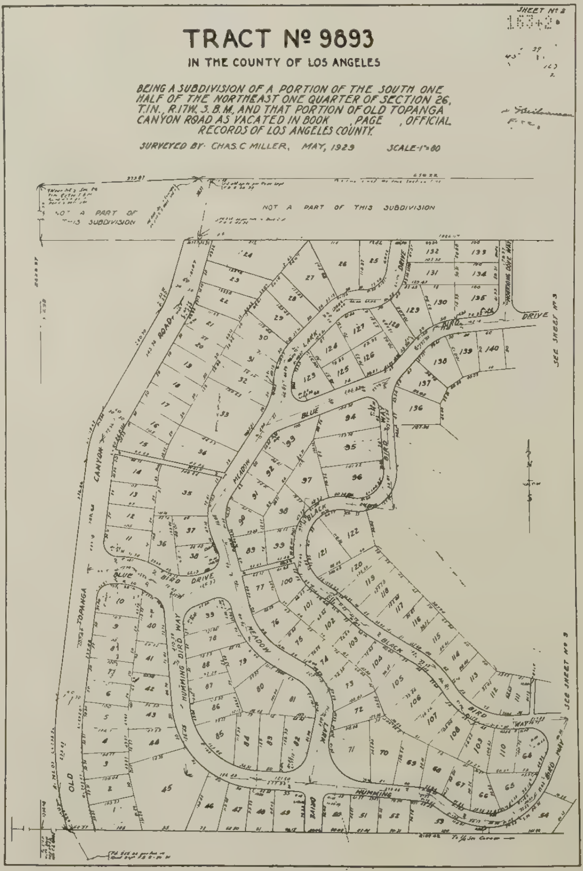
Wilshire Boulevard, Los Angeles

Alosta Avenue, Glendora, Under Construction

Huntington Drive, Monrovia

LOT SIZES

In adopting a planning policy consistent with the development most desired in California cities, a difficult question which had to be settled was the determination of the proper minimum size of lots. To avoid overcrowding in the ultimate stage of development, it has been thought advisable to require that those intended for ordinary residential use should have an area of not less than 5000 square feet. First adopted as a minimum at the suggestion of the City and County Engineers' Association in 1923, experience has demonstrated the justification of this regulation. The Commission believes that the width of residential lots should not be less than fifty feet. An exhaustive study of lot sizes made by the Subdivision Section in April of this year showed conclusively the greater relative value to the community as a whole of lots fifty feet wide as compared with those of lesser widths. Such lots were in greater demand, had better resale values, were more readily adaptable to different types of use, reduced the likelihood of land overcrowding and in general were found to produce a better type of development. In the case of hillside and canyon cabinsites, to which people go for seclusion and rest, there is no reason for reducing this standard. In fact actual observation of builtup communities of this type rather indicates the contrary. Experience has shown that better values can be established, and that finer development will result, with less fire hazard, if the lot areas are increased rather than decreased.


SHEET No 2
TRACT No 9893
IN THE COUNTY OF LOS ANGELES
BEING A SUBDIVISION OF A PORTION OF THE SOUTH ONE HALF OF THE NORTHEAST ONE QUARTER OF SECTION 26, T.1N., R.17W., S.B.M., AND THAT PORTION OF OLD TOPANGA CANYON ROAD AS VACATED IN BOOK , PAGE , OFFICIAL RECORDS OF LOS ANGELES COUNTY.
SURVEYED BY · CHAS. C MILLER, MAY, 1929
SCALE-1"=80
NOT A PART OF THIS SUBDIVISION
NOT A PART OF THIS SUBDIVISION
CANYON ROAD
OLD TOPANGA
BLUE BIRD DRIVE
HUMMING BIRD WAY
MEADOW LARK
SEE SHEET No 3

Apartment House, Pasadena. Units Grouped Around a Spanish Patio.

APARTMENTS AND COURTS

When it is known that the land is likely to be used for apartment houses or courts, the question of lot sizes is of the greatest importance, and good results cannot be obtained by adhering to such a minimum area. The size of the lot upon which an apartment house is placed may very materially affect its value as an investment. The absence of sufficient open space

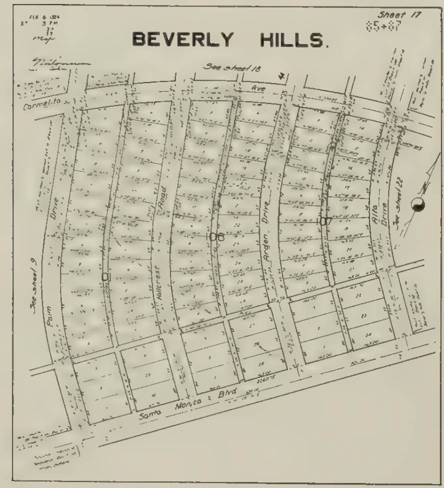
A Court, With Generous Allowance for Garden.

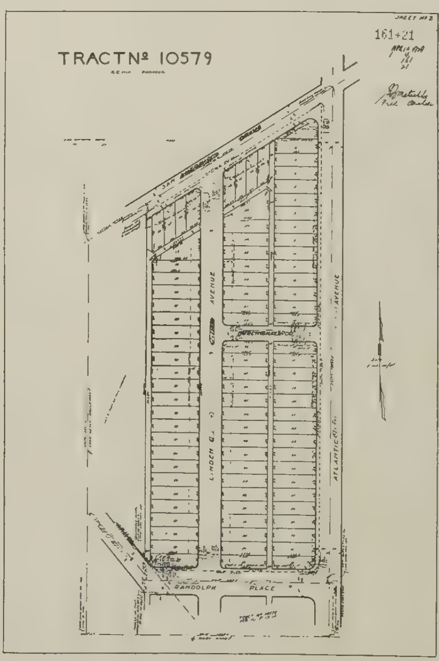
about such a building, the erection of close-up rivals on adjacent lots, or the arrangement of windows on narrow interior courts, may reduce the percentage of occupancy, and consequently the earning power. There is a growing demand for large deep lots for such buildings, and several adjacent lots or even entire blocks are sometimes purchased so as to permit better arrangements of units. One of the surest ways to increase the earning power of such buildings has been found to be provision for a set-back from the street line so as to permit some landscape treatment of the front yard. Such treatment contributes to the appearance of the building. This brings increased rentals and a greater proportion of long-term tenants, for such a building is more attractive and home-like. At least 25 feet should be allowed for effective planting. This, with the necessary depth of the building itself and proper allowance for a rear yard and garage space, indicates that not less than 150 feet in depth should be required for such lots.

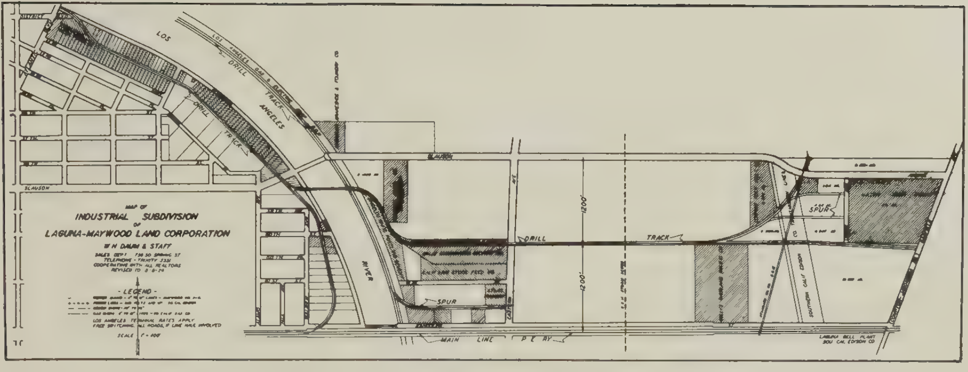
BUSINESS LOTS

A survey has shown that the average depth of business buildings is not more than 60 feet, which would indicate a lot-depth of 100 feet as sufficient where this use is definitely established. There should be a 20-foot alley in the rear of all such lots, as shown in the drawing on page 22.

The two subdivisions shown here are examples, one in a curvilinear, the other in a straight layout, of the increasing popularity of the deep lot as a high-class residential unit.



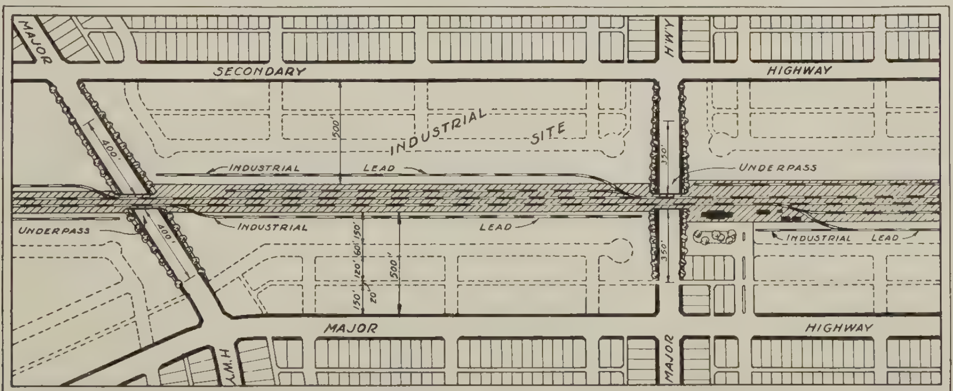



MAP OF
INDUSTRIAL SUBDIVISION
OF
LAGUNA-MAYWOOD LAND CORPORATION
W H DAUM & STAFF
SALES DEPT 730 SO SPRING ST
TELEPHONE - TRINITY 3331
COOPERATING WITH ALL REALTORS
REVISED TO 8-8-29
- LEGEND -
LOS ANGELES TERMINAL RATES APPLY
FREE SWITCHING ALL ROADS, IF LINE HAUL INVOLVED
LOS
ANGELES
RIVER
DRILL
TRACK
SLAUSON
SPUR
MAIN LINE
P E RY
1200'

An Actual Industrial Subdivision

INDUSTRIAL PROPERTY

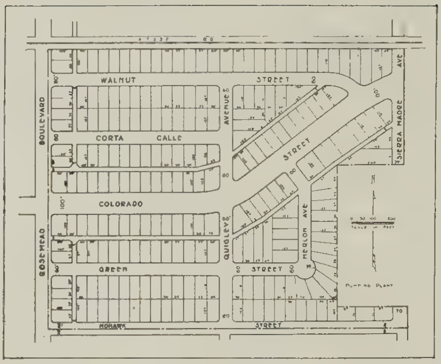
Industrial land is usually disposed of at better advantage if held in acreage and sold in parcels adequate for the specific needs of each purchaser. The average minimum width of property used for industrial purposes along railroads is 200 feet, which indicates that lots intended for this use should have at least that depth. In order to preserve a maximum amount of industrial land, which is never too abundant, it has been the policy of the Commission to avoid planning any highway immediately adjacent to a railroad right-of-way. Local streets should be at least 150 feet, and the center-lines of all highways at least 500 feet therefrom, as shown in the diagram below.



PROPER LOCATION OF HIGHWAYS PARALLEL TO RAILROAD MAKES POSSIBLE THE DEVELOPMENT OF THE LAND BETWEEN FOR EITHER INDUSTRIAL OR RESIDENTIAL USE AND ALLOWS SUFFICIENT DISTANCE FOR GRADE SEPARATION.

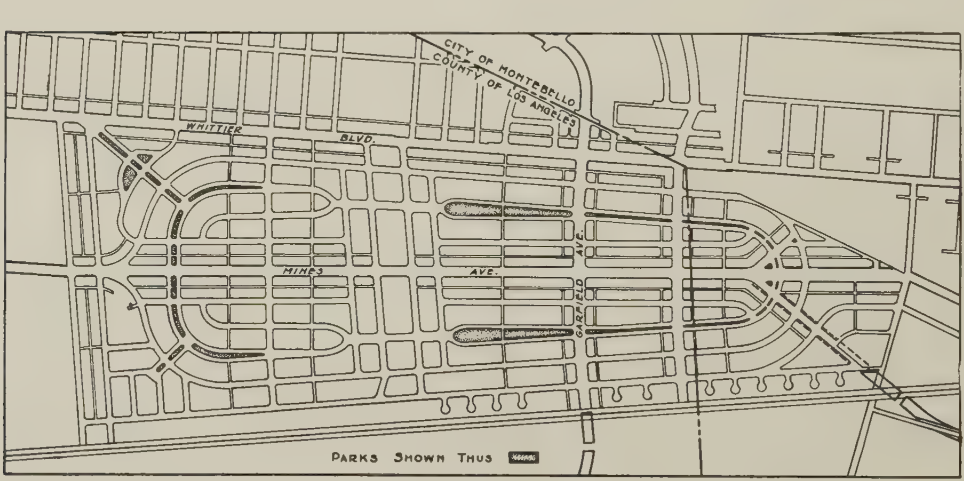
THE REGIONAL PLANNING COMMISSION
CHARLES H. DIGGS, DIRECTOR. WM. J. FOX, CHIEF ENGINEER.
SUBDIVISION SECTION
J. A. MELLEN SUBDIVISION ENGINEER
100 0 100 200 300 400 500
SCALE IN FEET
LOS ANGELES COUNTY, CALIFORNIA. JULY 1929

CITIES ASSISTING IN REVISION



Note the rounding of corners, the dedication along the west edge for a Major Highway, the relation of streets to the railroad, and the provision for the extension of Colorado Street, another Major Highway, in this subdivision, east of Pasadena.

The subdivision regulations as drafted by the City and County Engineers' Association in 1923 and adopted by the Regional Planning Commission have been revised only very slightly in the course of the six years they have been in use—these revisions consisting mainly of adjustment of details of procedure and the smoothing out of the language. Conferences are under way at the present time with city and county officials and subdividers, with the object of reaching agreement on a standard set of regulations. It is hoped that these will prove suitable for adoption not only by the County, but by every city within the County so that all will be in accord on this matter. The text of the regulations as now in use is given on the following pages.



An Attractively Designed Subdivision, Montebello.

REGULATIONS FOR THE SUBDIVISION OF LAND

NOTE TO THE ENGINEER

The following subdivision regulations are the standard of practice which have been in general use in the unincorporated territory of the County of Los Angeles since 1923. When preparing to subdivide a parcel of land, the Engineer should:

1. Confer with the Subdivision Engineer of the Regional Planning Commission, or his assistant, as to the highway, subdivision and zoning plans of the Commission affecting this parcel of land.
2. Obtain a tract number from the office of the County Surveyor.
3. Read the Subdivision Regulations carefully.
4. Prepare a Tentative Map on tracing paper or tracing cloth showing all information as listed in the regulations.
5. Submit the original and as many copies as required to the Regional Planning Commission, with all information which is likely to affect the plan.
6. Receive a receipt for copies in the name of the record owner from the Commission.
7. Receive the returned original with recommendations of the Commission.
   Note: No part of the final survey or final calculations for this map pertaining to lots or street plan should be made until the recommendations of the Commission on the tentative map have been received.
8. Proceed with the preparation of the final map and survey, as prescribed by the Map Act of 1929, in accordance with recommendations of the Commission and other County Departments.

An approval of the map will be given by the Commission when all requirements have been met.

TENTATIVE MAP

Under the state law, whenever a subdivision is to be placed on the market, a map thereof must be offered for record which is subject to approval by the planning commission. The original of a tentative map, on tracing cloth or paper, and ten copies thereof, must be filed with the planning commission. Where the subdivision is within three miles of the corporate limits of any city, two additional copies for each such city will be required. An additional copy will be required for a subdivision on a State Highway and for a subdivision planted to citrus trees. This map must be drawn to a scale (preferably 100 feet to the inch) sufficiently large to show the details of the plan clearly, and shall indicate:

(a) The tract number, and the commercial name, if any;

(b) Sufficient legal description to define location and boundaries;

(c) Name and address of record owner, subdivider and engineer;

(d) Location, names and present width of adjacent streets, highways or ways;

(e) The width and approximate grade of all streets, highways and ways proposed for dedication;

(f) The approximate width and location of all easements for drainage, sewage or public utilities;

(g) The approximate radius of all curves;
(h) The approximate dimensions of all lots;
(i) The approximate location of areas subject to inundation or storm water overflow and the location, width and direction of flow of all water courses;
(j) Source of water supply (or note stating source);
(k) Method of sewage disposal (or note stating method);
(l) Use of property, proposed;
(m) Public areas proposed, if any;
(n) The tree planting plan, if any;
(o) Contour lines (where topography controls the layout);
(p) Date, north point and scale;

Sufficient blank space should be allowed on the sheet for certificates and approvals.

1. HIGHWAY PLAN The Regional Plan of Highways shall be the basis for all subdivision plans. The tentative map will be disapproved if improper or inadequate provision is made for streets, highways and ways.

2. MAJOR HIGHWAYS Major Highways, as planned along section lines, or along lines of heavy or projected heavy through traffic flow, will be required to have a width of not less than 100 feet; provided that

(a) where there is a railroad right-of-way down the center, a width of 60 feet will be required on each side thereof;
(b) where parkways are indicated by the topography, or are needed to connect units of the regional park system, greater widths may be required;
(c) in mountainous country, widths somewhat less may be accepted.

3. SECONDARY HIGHWAYS Secondary Highways, as planned approximately midway between Major Highways, will be required to have a width of not less than 80 feet; provided that

(a) where there is a railroad right-of-way down the center, a width of 50 feet will be required on each side thereof;
(b) in mountainous country, widths somewhat less may be accepted.
Note: Where a major or secondary highway is planned adjacent to a railroad right-of-way, the width required may be reduced by the omission of the usual parking strip and sidewalk on that side. Width for the curb will not be omitted.

4. STREET WIDTHS Through streets, and, in general, all other streets will be required to have a width of not less than 60 feet; provided that

(a) where the type of adjacent development or other economic factors render it advisable, very short streets in residential districts may be accepted with a width of 50 feet;
(b) similarly, local streets in steep hillside subdivisions may be accepted to a minimum width of 30 feet provided a 20-foot roadway is practicable.

5. ALIGNMENT All streets will be required, as far as practicable, to be in alignment with existing streets and in general conformity with the plans made for the most advantageous development of the area. Streets will be required to intersect one another at an angle as near to a right angle as is practical in each specific case.

6. CONTINUITY

Where a new subdivision adjoins acreage likely to be subdivided later, the new streets will be required to be dedicated through to the boundary lines of the tract.

7. DEAD-END STREETS

Dead-end streets will not be approved where a through street is practicable. Wherever a dead-end street is permitted, an adequate turning circle will be required.

8. GRADES AND CURVES

A grade exceeding 6% will not be approved except for short stretches where the topography makes it necessary. But no grade over 10% will be approved, except where conclusive evidence is given that a lower grade is not practicable. A center line radius of not less than 75 feet will be required for curves on local mountain roads. A center line radius of not less than 300 feet will be required on mountain roads of major importance. A lesser radius will be considered in either case only when sufficient evidence is given that these radii are not practicable.

9. STREET IMPROVEMENTS

The subdivider will be required to improve or agree to improve all land dedicated for streets, highways and public ways. Such improvements are to include street surfacing, sidewalks, curbs, culverts, bridges, drains, domestic water supply and other structures necessary to the use of such streets, highways and public ways or the proper drainage thereof, as required for the particular subdivision.

10. POSTING OF BONDS

If the improvement work be not completed satisfactorily before the streets are dedicated, the owner or owners of the subdivision will be required immediately upon acceptance of the final map to enter as contractor into an agreement with the Board of Supervisors, whereby, in consideration of the acceptance by the Board of the highways offered for dedication, the contractor agrees to furnish the equipment and material necessary and to complete the work within the time specified in the agreement. To assure the County that this work will be completed, two bonds must be furnished, one guaranteeing the faithful performance of the work in a sum equal to the estimated cost, and the other a bond for the security of material, men and labor in a sum equal to one half of the estimated cost. These bonds must be furnished by a surety company.

11. STREET PLANS AND PROFILES

Plans and profiles of the proposed street improvement must be furnished to, and approved by the County Road Department, before the map will be accepted for record. These plans and profiles will be required to show full details of the proposed improvements, according to the standards and specifications required by the County Road Department.

12. CORNER TREATMENT

At all block corners a rounding at the curb and a rounding or a diagonal cut-off at the property line will be required as follows:

(a) where two streets 80 feet or more in width intersect at an angle of 90°, or where a local street intersects a street 80 feet or more in width at an angle of 90°, a 17-foot cutoff, measured along the tangent from the point of intersection, or a curve with a radius of 30 feet, will be required on the property line.

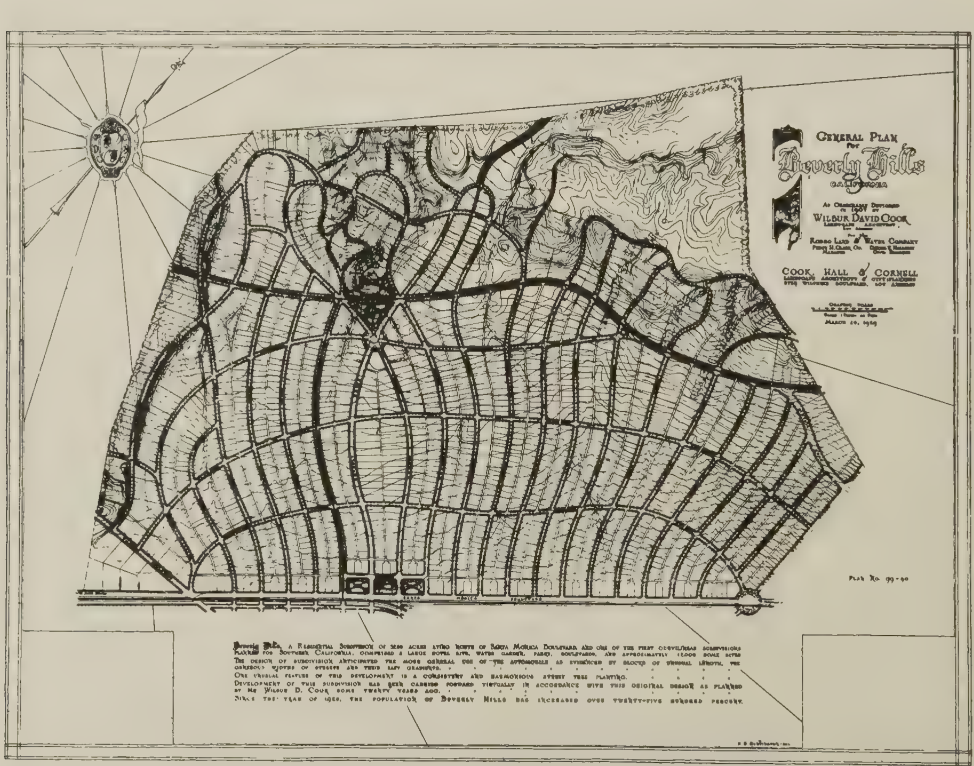
(b) where two local streets intersect at 90°, the block corner will be required to have a 17-foot cutoff or a curve with a radius of 15 feet on the property line.

(c) streets which intersect at angles other than 90° will be considered as special cases. No intersection of streets at angles less than 30° will be approved.

13. ALLEYS Alleys 20 feet in width will be required in the rear of all property facing on all streets 80 feet or more in width. In other cases alleys may be required. Where two alleys intersect, a 10-foot cutoff will be required. In all cases where alleys are not provided, easements of a width adequate for such storm drains and sanitary sewers or other public utilities as the case demands will be required along the rear of each lot, and elsewhere if necessary.

14. BLOCKS Blocks over 900 feet in length will not be approved, unless the previous layout or topographical conditions justify a variation from this requirement. Long blocks are to be encouraged adjacent to main thoroughfares in order to reduce the number of intersections. The width of blocks, in general, will be required to be sufficient to allow for two tiers of lots.

15. PEDESTRIAN WAYS A pedestrian way 10 feet in width will be required through the middle of blocks over 900 feet in length.



The Original Tract Map of Beverly Hills

16. LOTS

All lots will be required to have an area of not less than 5000 square feet. Lots will be required to have a frontage of not less than 50 feet each, except where zoned by ordinance for business use.

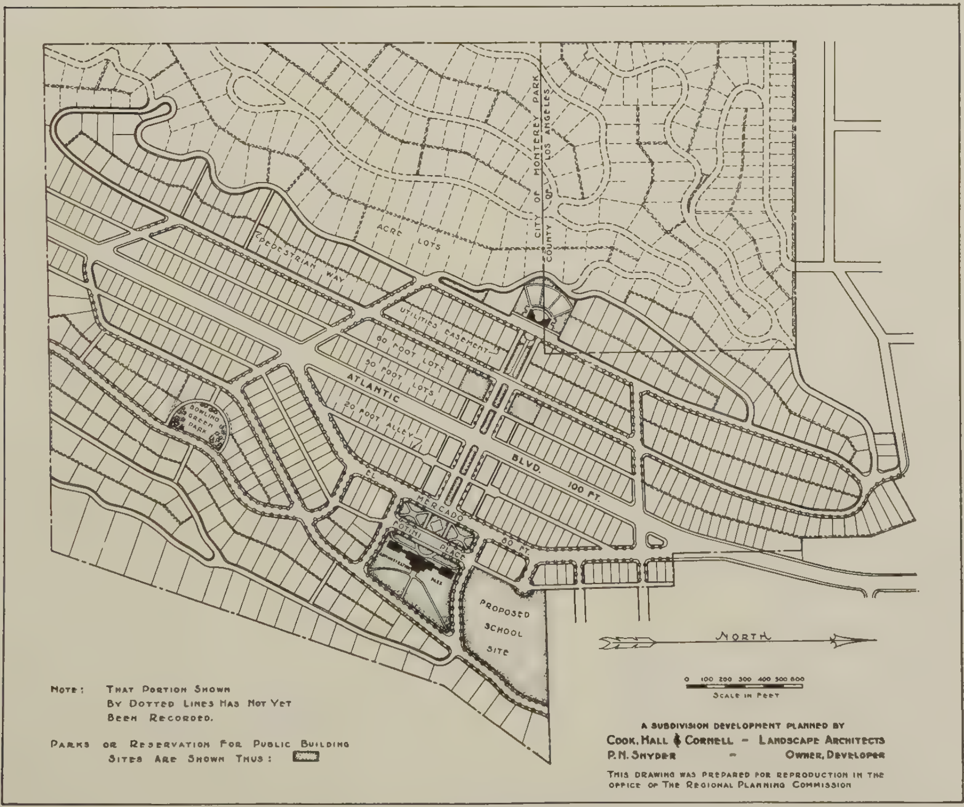
- (a) The side lines of lots will be required to run at right angles to the street upon which the lot faces as far as practicable.
- (b) Lots having double frontage will not be approved except where this is necessitated by topographic or other physical conditions.
- (c) Lots fronting on major or secondary highways will be required to have a depth of 120 to 150 feet, or more, according to the use.
- (d) No lots without frontage on a public street will be approved, except where city boundary lines or Torrens Title lines make it necessary.

17. BUILDING LINES

A building or set-back line may be required to be established not less than 20 feet from the front property line of the lot, and on corner lots not less than 10 feet from the side street line. This requirement may be modified where the topography or other conditions make it advisable.

18. RAILWAY CROSSINGS

If the question of railway crossings is involved, the plan of the subdivision will be considered in its relation to the probability of a grade separation or other treatment, and may be required to conform to certain conditions in anticipation of such treatment.


City of Monterey Park
County of Los Angeles
Acre Lots
Pedestrian Way
Utilities Easement
60 Foot Lots
50 Foot Lots
Atlantic Blvd. 100 Ft.
20 Foot Alley
Bowling Green Park
El Mercado 80 Ft.
Fotini Place
Proposed School Site
North
0 100 200 300 400 500 600
Scale in Feet
Note: That Portion Shown By Dotted Lines Has Not Yet Been Recorded.
Parks or Reservation For Public Building Sites Are Shown Thus:
A Subdivision Development Planned by
Cook, Hall & Cornell - Landscape Architects
P.N. Snyder - Owner, Developer
This drawing was prepared for reproduction in the office of The Regional Planning Commission

A Subdivision on Atlantic Boulevard, Monterey Park

19. INDUSTRIAL PROPERTY Where the subdivision is adjacent to a railroad right-of-way and the topography of the country or any zoning plans indicate that such property will be used for industrial purposes, highways, in the same general direction as the railroad will be required to be as nearly parallel to such railroad right-of-way as practicable and at least one lot-depth distant therefrom.

20. CITY PLANS Subdivisions adjacent to a municipality will be considered with respect to the special subdivision standards of the municipality as well as the requirements of the Regional Planning Commission.

21. APPROVALS Tentative approvals of subdivisions will be effective for one year unless extended by agreement with the Regional Planning Commission. Tracts not recorded within this time must be re-submitted, and will be considered as new tracts. The County of Los Angeles reserves the right to insist on the dedication of streets, highways or other public ways where deemed necessary for public use.

ADDITIONAL CONSIDERATIONS In addition to the definite requirements established on the preceding pages, the Regional Planning Commission desires to emphasize the importance of certain additional considerations.

(a) *Park and school sites.* While not officially required, the reservation for public use of 10 to 15 per cent of large subdivisions is strongly urged, and has been frequently demonstrated to be an economically sound provision.

(b) *Trees.* The planting of street trees in new tracts is a duty, as well as a piece of good business, and every subdivider should have a definite planting plan.

(c) *Restrictions.* The commission also approves and recommends that certain basic restrictions be established by the recording of a declaration of restrictions, as one of the best means available for the preservation of values. Such restrictions should include set-back lines, easements for utilities, and area regulations. In certain cases use regulations should also be established in this manner.

IMPORTANCE OF CARE IN LAND SUBDIVISION A subdivision is not merely a means for marketing land; it is far more, a process in community building. The fleeting economic effect of the act of selling soon gives way to the permanent, inexorable economic and social effect of the layout as a part of the form and life of the community. No subdivision is too small to have character. It may be no more than the appropriate curving of a street, or the arrangement of the lots, or the skillful use of set-backs, or the planting scheme; but it may give a mere linear design distinctiveness, life and charm. The Staff of the Commission is prepared to give to all who are interested its advice and assistance in every detail pertaining to this work of community building. It is suggested that the Regional Planning Commission be consulted before tentative maps are prepared.

REGULATION INVOLVES MORE THAN RULES

Successful subdivision control involves much more however than the routine application of a set of regulations. The real proof of the planning organization's effectiveness is found rather in the methods of handling the varied interests and personalities involved so as to produce harmony and willing cooperation. The protection and development of the major highway system through dedications in connection with new subdivisions depends upon gaining the confidence of the property owners, and this can only be done by establishing a reputation for fairness, for reasonableness, and for firmness. All must be dealt with on the same basis so that faith may be kept with those who have gone before, and the right maintained to make equal requirements of those who are to come. But in addition there is the element of design. Individuality is not be to discouraged, and each new tract must be seen as a new problem, different from every other, and requiring its own special treatment. One or two examples will be of interest as demonstrations of the widely differing problems encountered.

THOROUGH STUDY BRINGS OUT BEST TREATMENT

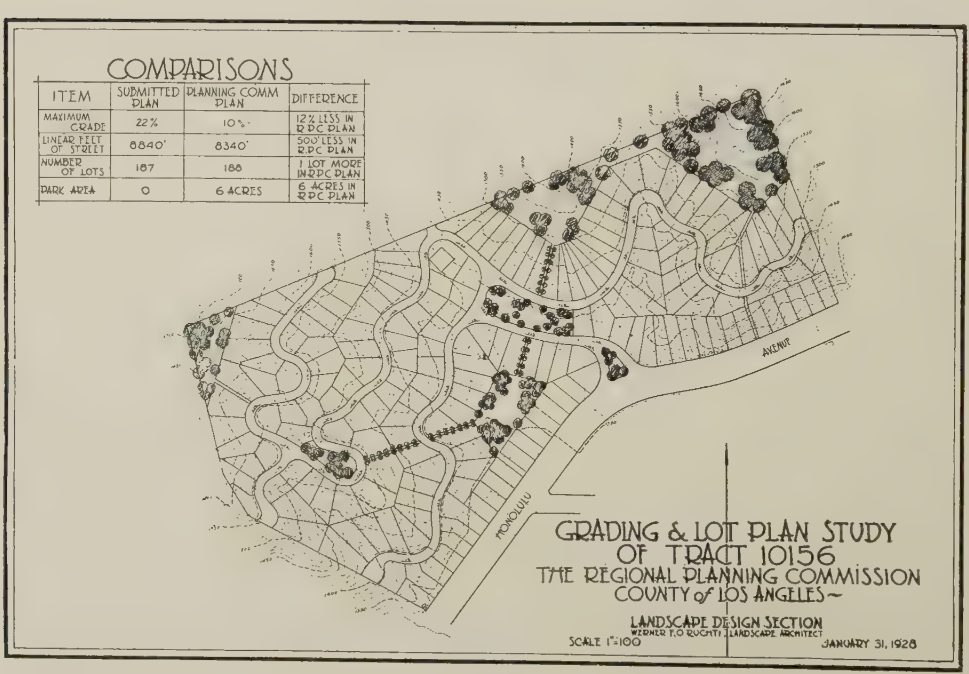
The first drawing shown is of a tract lying in a rather rugged portion of the La Crescenta Mountains. It illustrates the value of preparing a number of alternate schemes for a subdivision or a parcel of land. Frequently persons who are not familiar with the work of preparing tentative subdivision layouts overlook the importance of this. Not only does this method

OCCUPANCY OF LOTS IN LOS ANGELES COUNTY

Date	Total Number	Occupied	Percent.	Vacant	Percent.
July, 1924	900,412	404,293	45	496,119	55
January, 1925	929,762	....	......	....	......
January, 1926	964,222	....	......	....	......
January, 1927	1,005,130	....	......	....	......
January, 1928	1,040,044	....	......	....	......
January, 1929	1,073,971	507,293	47	566,678	53

Note: Over half of the lots in Los Angeles County were vacant in 1924 and the vacancy was decreased by only two percent up to January 1, 1929. However, there has been a material reduction in the number of subdivisions being placed on the market, and a gradual reduction of this lot vacancy is expected in the next few years.

lead to better design, but it furnishes a basis for comparison. It brings out hidden possibilities. Sometimes several treatments can be combined to render maximum value and a more effective design. The Commission gave this tract, as first submitted, very careful attention. It was evident at once that the terrain had many interesting natural features, which, with some study, could be developed so as to enhance the value of the tract as a whole and of the individual lots. It was noted, too, that as the first subdivision in this particular district, development would tend to set an example for those to follow. The proposed layout as presented did not conform to the regulations. There were excessive grades, sharp curves and lots which lacked proper frontage. There was inadequate provision for the ultimate extension of the streets into adjacent property which might later be subdivided. Nor had the engineer availed himself fully of the natural advantages of the area under his control. As an example of the value of study and design in such cases, the alternative layout shown was worked out by the Subdivision Section and the Landscape Design Section. The revised plan was not only in full conformity with the regulations, but also provided more lots with better grades and without increasing the length of street. Further, six acres were allocated for parks at strategic locations, which clearly enhanced the value of the entire subdivision.



COMPARISONS

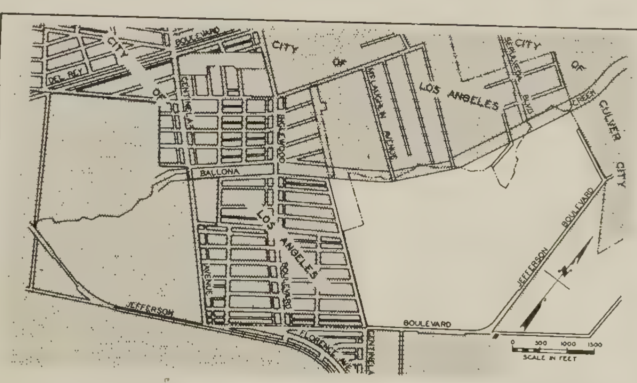
ITEM	SUBMITTED PLAN	PLANNING COMM PLAN	DIFFERENCE
MAXIMUM GRADE	22%	10%-	12% LESS IN R.P.C PLAN
LINEAR FEET OF STREET	8840'	8340'	500' LESS IN R.P.C PLAN
NUMBER OF LOTS	187	188	1 LOT MORE IN R.P.C PLAN
PARK AREA	0	6 ACRES	6 ACRES IN R.P.C PLAN

SUMMARY OF LAND SUBDIVISION ACTIVITY IN THE UNINCORPORATED TERRITORY OF LOS ANGELES COUNTY

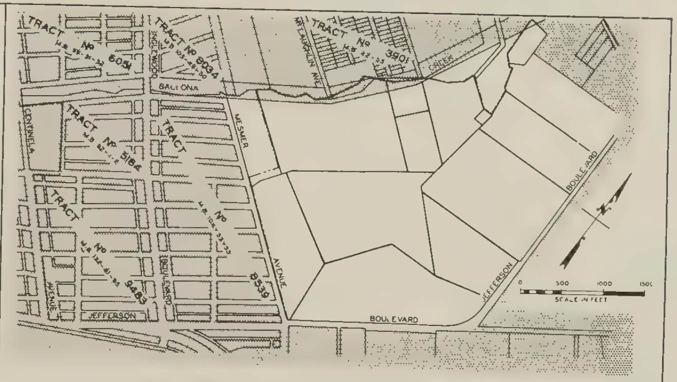
Year	1923	1924	1925	1926	1927	1928	Total
No. of tracts submitted to the Regional Planning Commission	645	340	276	198	182	124	1765
No. of tracts recorded	546	433	205	106	101	74	1465
No. of tracts appealed to the Regional Planning Commission	9	25	25	22	33	21	135
No. of lots resulting from tracts submitted	......	19328	17065	12006	14135	10143	72677*
Total acreage of tracts submitted	......	6737	10005	6688	8918	32392	64740*
Acreage of the residential subdivisions, exclusive of farm subdivisions and boundary surveys	......	4105	5601	4752	5048	3078	22584*
Average No. of lots per acre in residential subdivisions	......	5.00	5.16	5.16	4.56	5.10	5.00*
Miles of 80-foot highway widened by dedication in subdivisions	2.24	5.47	2.20	1.29	0.85	0.46	12.51
Miles of 100-foot highway widened by dedication in subdivisions	3.85	9.25	5.71	3.57	0.91	1.55	24.84
Miles of 80-foot highway dedicated full width	2.78	5.65	2.28	2.81	0.71	9.99	24.22
Miles of 100-foot highway dedicated full width	2.54	16.54	3.93	2.64	0.52	2.92	29.09
Total miles of major and secondary highways secured by such dedications	11.41	36.91	14.12	10.31	2.99	14.92	90.66

* From April 18, 1924.

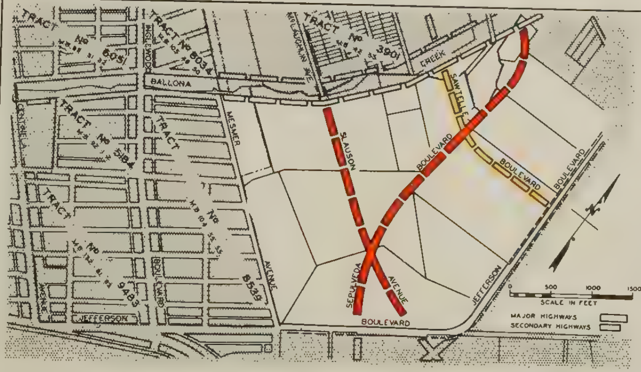
A STUDY IN LAND SUBDIVISION



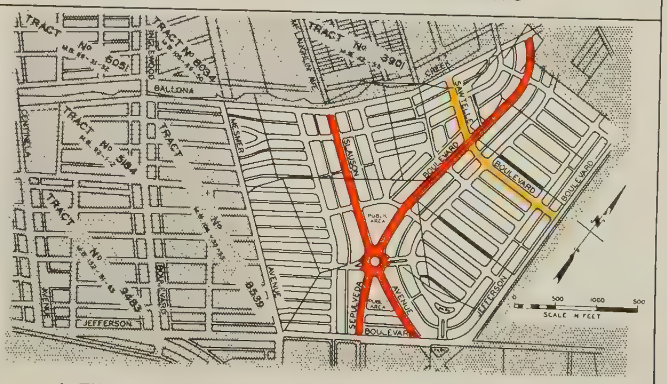
I. LOCATION WITH REFERENCE TO EXISTING DEVELOPMENT



2. DIVISION INTO SEPARATE OWNERSHIPS



3. THE HIGHWAY PLAN - EXISTING AND PROPOSED



4. THE STREET AND BLOCK PLAN - PUBLIC AREAS RESERVED

PREPARED BY THE SUBDIVISION SECTION

THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES

PROPERTY OWNERS CO-OPERATE TO PROTECT PLAN

In the example shown on the opposite page, the acreage was of such irregular shape that unless some coordinated plan were worked out, no single parcel could be resubdivided advantageously. This frequently occurs even in the cutting up of holdings which originally followed the usual rectangular survey lines. In the third drawing the location of the proposed major highways intersecting the area is shown. In such a case, it was the duty of the Commission to indicate a design whereby all properties could be subdivided to advantage, providing at the same time for the continuity of both streets and highways through the entire tract. The ultimate subdivision of this property will probably follow very closely along the lines of this study.

WORK OF THE SUBDIVISION SECTION

These are but two examples out of many in which the Subdivision Section is striving to secure layouts of better character and higher value, which contribute to the general embellishment of the community. The tables on this and the following page give a measure of the work of this Section, and show how many miles of Major and Secondary highways have been dedicated to public use through its efforts in the course of the subdivision activities of the past six years.

PERCENT OF STREET AREA ACTUALLY DEDICATED IN RESIDENTIAL SUBDIVISIONS

1924-1928

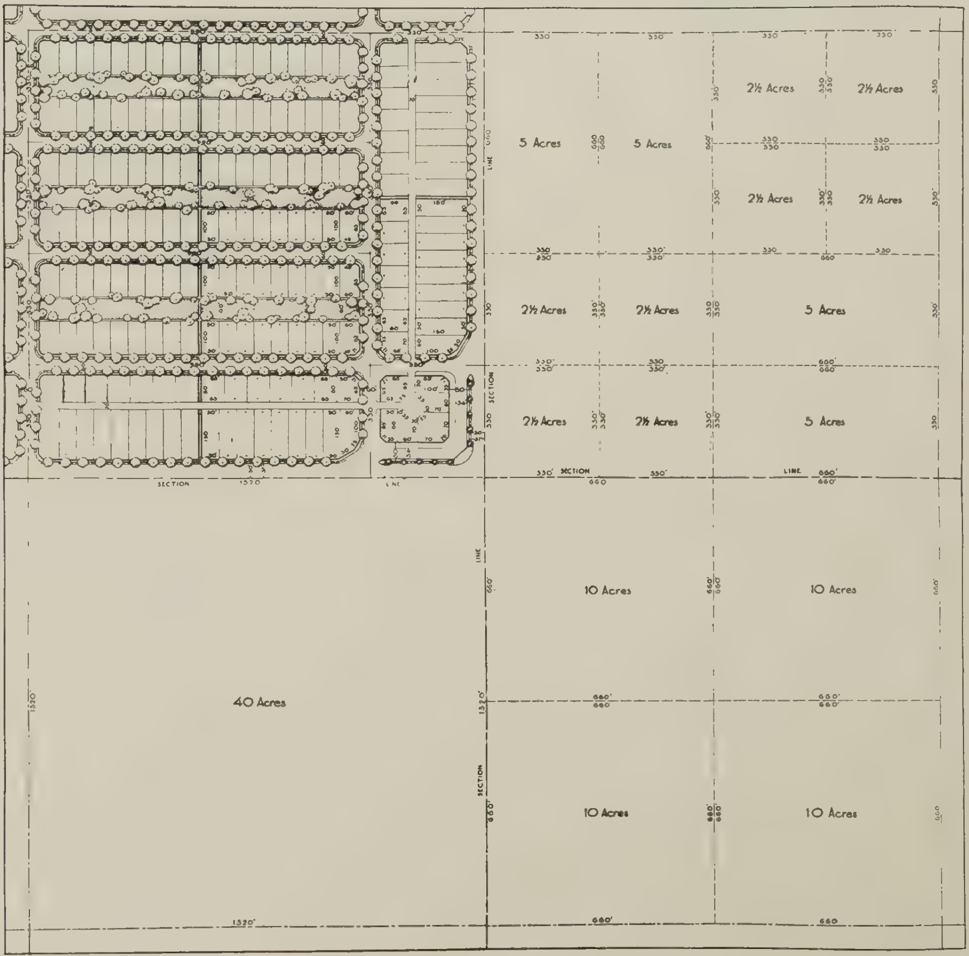
Year	1924	1925	1926	1927	1928
Percent	22.60	23.17	25.19	29.57	20.00

NORMAL STREET AREA REQUIRED BY THE REGIONAL PLAN FOR A SQUARE MILE OF URBAN DEVELOPMENT

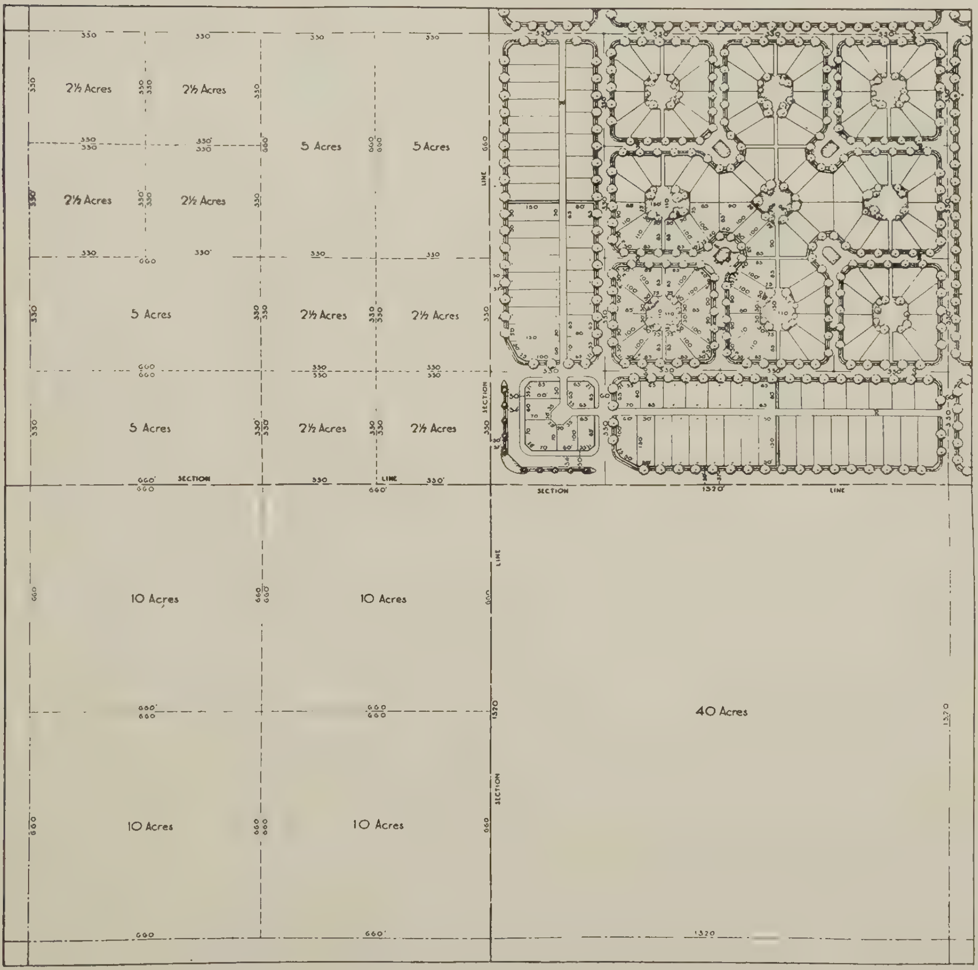
Purpose of Dedication	Acres	Percent of Total Acreage
Major Highways	24.01	3.75
Secondary Highways	18.88	2.95
60-foot Streets	135.15	21.12
20-foot Alleys	18.42	2.88
TOTAL	196.46	30.70

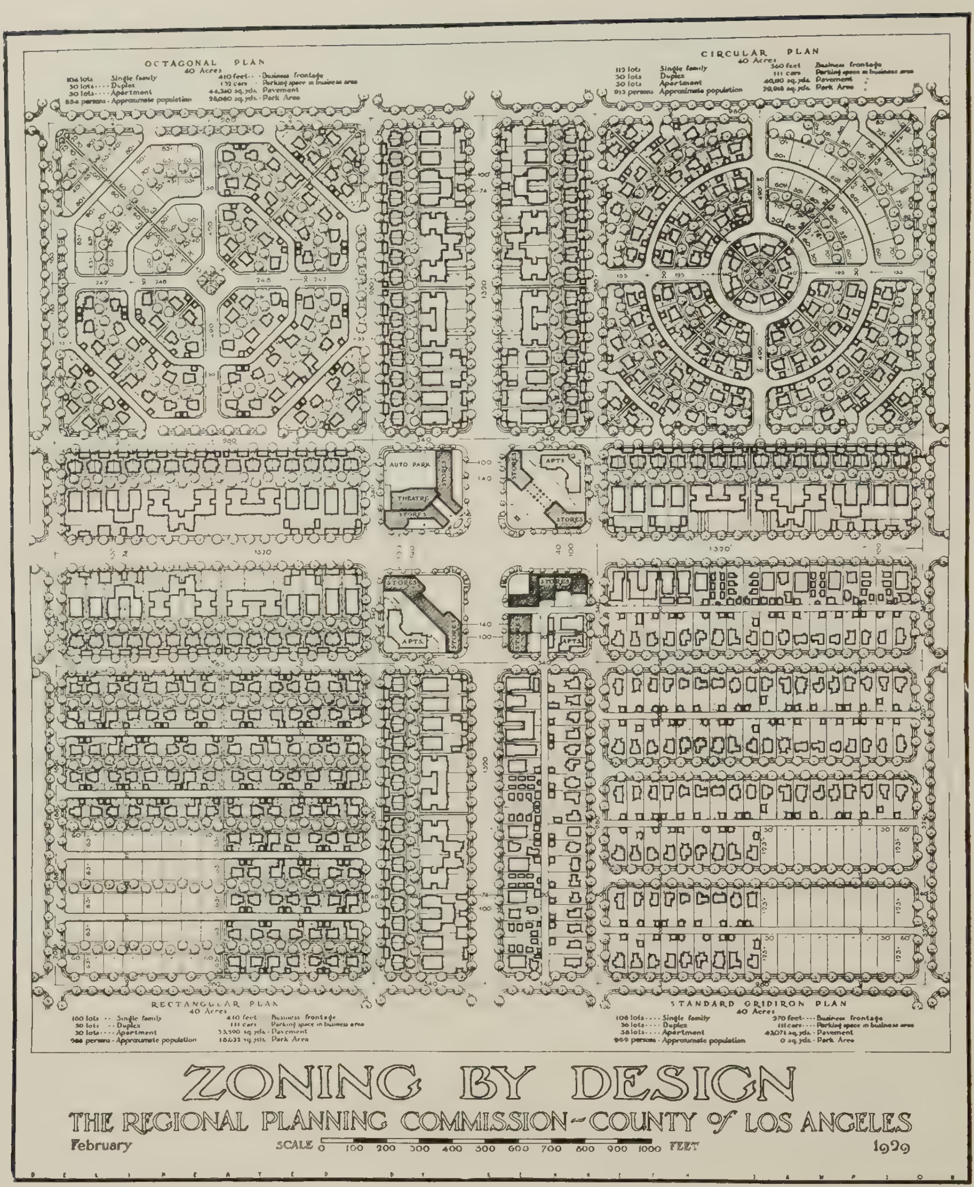
SPECIAL STUDIES

While these practical results were being secured, the Commission has been making studies intended to encourage further thought and discussion as to methods of subdividing land. New ideas have been welcomed and analyzed, always in the hope that something of value may result. The drawings on this and the following page are examples of such studies. Each shows the typical breaking up of a quarter-section of land, first into 40-acre lots, then into parcels of 10, 5 and 2½ acres. The first drawing then shows how, without doing violence to any of these typical ownership lines, an arrangement of streets, blocks and lots may be had which, while departing



materially from present methods, is believed to be thoroughly practical if wisely handled and financed. Items to be noted are (1) deep lots along the major highways, (2) extra roadway and parking space at the business corner, (3) by-pass streets, (4) parked recreational areas down the middle of the three interior blocks, and (5) residential streets, not extending across the major highway. The other drawing indicates another possibility, in which the interior residential streets are so designed as to discourage through traffic, and the parks are placed in the center of groups of lots forming a square. Pedestrian access to all parks, and a place for utilities is provided by the walks which traverse these blocks. The treatment of the exterior blocks is the same as before.




OCTAGONAL PLAN
40 Acres
106 lots Single family
30 lots····Duplex
30 lots····Apartment
834 persons · Approximate population
410 feet·· ·Business frontage
132 cars · Parking space in business area
44,240 sq. yds. Pavement
28,080 sq. yds. · Park Area
CIRCULAR PLAN
40 Acres
112 lots Single family
30 lots Duplex
30 lots Apartment
913 persons Approximate population
360 feet Business frontage
111 cars Parking space in business area
40,110 sq. yds. Pavement
20,918 sq. yds. Park Area
AUTO PARK
THEATRE
STORES
APTS
RECTANGULAR PLAN
40 Acres
100 lots ·· Single family
30 lots ·· Duplex
30 lots···· Apartment
908 persons · Approximate population
410 feet Business frontage
111 cars Parking space in business area
33,390 sq. yds. · Pavement
18,633 sq. yds. Park Area
STANDARD GRIDIRON PLAN
40 Acres
108 lots···· Single family
36 lots···· Duplex
38 lots···· Apartment
969 persons · Approximate population
370 feet···· Business frontage
111 cars···· Parking space in business area
42,071 sq. yds. · Pavement
0 sq. yds. · Park Area
ZONING BY DESIGN
THE REGIONAL PLANNING COMMISSION ~ COUNTY OF LOS ANGELES
February
SCALE 0 100 200 300 400 500 600 700 800 900 1000 FEET
1929

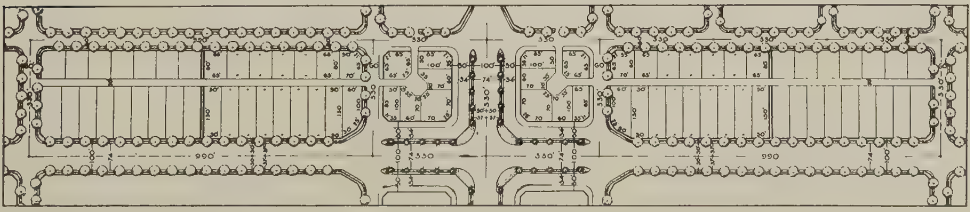
In this drawing is shown the intersection of two major highways, with some interesting suggestions for the development of the neighborhood business center along modern lines. The amount of business property is based on the needs of the ultimate population of the area when fully developed. By-pass streets sixty feet in width are provided a block away from the major highway, the frontage of which is shown here as developed for multiple residential use. Back of the by-pass street a different treatment is worked out for each of the 40-acre parcels. That in the lower right-hand corner is the ordinary gridiron plan of subdivision in general use today. Opposite is suggested an arrangement in which the houses face on interior block gardens, somewhat as in the recent successful development at Radburn, New Jersey, but conforming rather closely to established lines for the location of the streets. The two upper corners illustrate further possibilities of this idea and suggested the title "Zoning by Design", because the proper use to which various pieces of property are to be put is made self-evident and natural by the arrangement of the tract as a whole. Attention is called to the figures given opposite each corner which offer a means of comparing these designs quantitatively. These designs are not intended to serve as models, nor do they indicate the recommendations of this Commission. They are intended simply to stimulate discussion and to bring out new ideas.

ZONING AND THE HIGHWAY PLAN

It has already been pointed out that the proper design of the Highway System depends upon a knowledge of the ultimate population, and how this latter in turn depends upon land uses. There is in fact a complete interdependence between zoning—which is the regulation of the uses of private property, and highway design—which has to do with public lands reserved for the transportation of persons and goods. The two must be carried on concurrently, for each derives information from the progress of studies on the other. Just as the zoning indicates how much paved area will be needed, so the tentative framework of the highway system tells where the different use zones may properly be placed. It suggests locations well adapted for business and others which, because of their relative seclusion, may well be reserved for residential use. When there is a close relationship between these two phases of planning, the results inspire confidence and a sense of security. The business man feels sure that his shop or office will be readily accessible and correctly located with respect to both transportation and purchasing power. The home-owner sees at once the advantage of living in a protected internal district, free of heavy traffic, yet conveniently near shopping and transportation facilities. The preservation of the integrity of such residential districts was given particular attention in the designing of the Major Highway Plan.

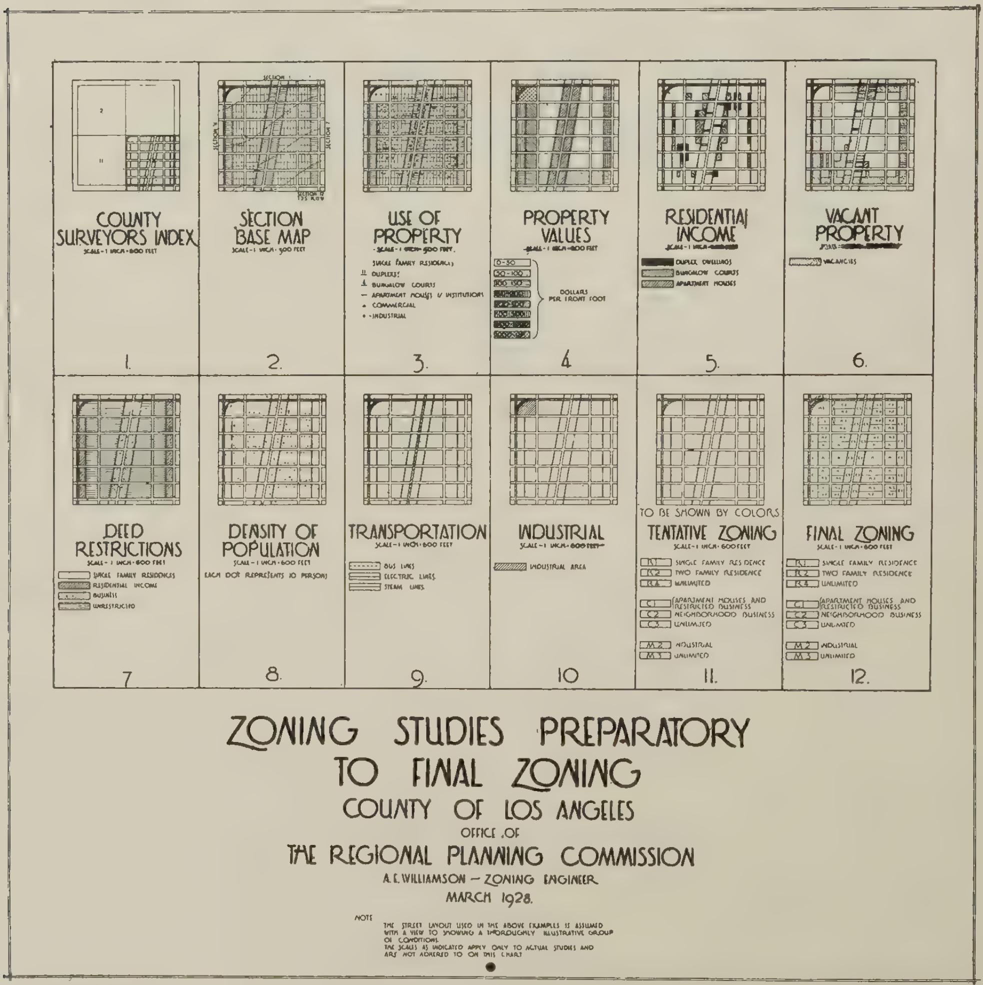
USE OF PROPERTY ALONG HIGHWAYS

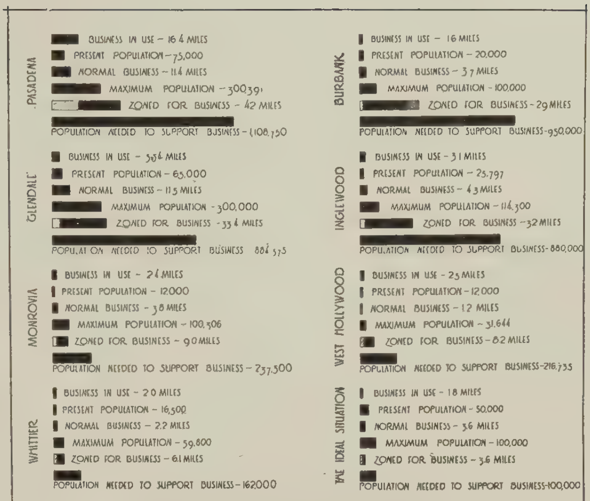
There is a tendency at the present time for business uses to spring up in a more or less scattered manner along the entire length of many of our major and secondary highways. This practice leads to great economic losses, both direct and indirect. Such businesses injure legitimate business centers and often fail due to lack of patronage. The natural development of intervening property is hampered, for no one wishes to build for other



Subdivision Design Determines Use

uses in blocks already invaded by small shops. Surveys made in several parts of the country have indicated that there is a rather definite relation between the population of a district and the number of front feet of business property that can derive support therefrom. Studies made by the Zoning Section of this Commission have led to the same conclusion, and it has been found that the size of the community does not affect this ratio, which remains constant at fifty feet per hundred population. This being true, it is obvious that selling or zoning property for business use in excess of this natural demand is sure to have unfortunate results for the community. To do so merely because the property fronts upon a major or secondary highway is a serious mistake.





RELATIVE PROPORTIONS OF BUSINESS AND BUSINESS ZONES TO POPULATION
OFFICE OF
THE REGIONAL PLANNING COMMISSION
MAY 1927

A certain typical square mile of area now has a population of 20,000 persons. The business frontage required to serve such a population is, theoretically, 10,000 feet, in accordance with the ratio of 50 feet per 100 persons established by surveys. Allowing 160 feet of depth for business property (100 feet for the lot depth, plus 50 feet for half the width of the major street in front and 10 feet for half the width of the alley in the rear), we find that 1,600,000 square feet would be needed. This works out as 5.75 per cent of the total area of the square mile, a figure which approximates the percentage of area now being actually used for business in all of the cities of the San Gabriel Valley. It is certainly reasonable to conclude that only such property as can be supported by the expected population should be sold or set aside for business.

FUTURE USES CAREFULLY ESTIMATED

Such business property is usually placed on the major and secondary highways. It will by no means require all such frontage. As each square mile has, or is planned to have approximately 40,000 lineal feet of frontage on such highways, of which 10,000 feet, or only one-fourth, can be reasonably expected to develop into business use, it is obvious that the remainder of this frontage must be devoted to other uses. It should be subdivided with sufficiently deep lots to permit use for apartment houses, duplexes and flats, and even for single-family residences, well set back from the traffic. An analysis of the square mile mentioned above was made in order to determine the actual conditions of present occupancy. This brought out the following interesting figures as to present uses (1929):

PRESENT USES OF PROPERTY

Single-family residence	72.3%
Business	6.5
Multiple dwellings	10.4
Industrial	5.0
Parks, playgrounds, and other public open spaces	5.8
	100.0%

In the light of these results the following table was constructed, representing standards which it is believed will furnish a fair basis for calculations as to the probable development of the Valley in years to come:

FUTURE USES OF PROPERTY

Single-family residence	60.0%
Multiple dwellings	15.0
Business	10.0
Industrial	5.0
Parks, playgrounds and other public open spaces	10.0
	100.0%

The allowance for business use is purposely liberal to allow for irregularities of development. It should be remembered, too, that these proportions are those of ultimate development, and that they are for the Valley as a whole. Individual districts will of course be expected to vary considerably from them and such variations have to be considered in planning.

INDUSTRIAL DEVELOPMENT AND POPULATION

The problem of business frontage has a corollary in the matter of industrial property, with the difference that the latter is rather difficult to preserve for its natural use. As has been the case in many other forms of development, a direct ratio is found between the amount of industrial development and population. To insure a desired growth of population there must be provided a corresponding amount of industry. In the San Gabriel Valley there are 108 industries, exclusive of rock crushers. In the urban areas the average persons per industry is 1,000. These occupy 254 acres of land, showing an average requirement of 2.35 acres for industrial enterprises, which correspond closely to conditions found in other sections of the County. These figures are from a survey conducted by the Commission. Every industrial enterprise in the district was visited, and particular attention was given to the type of industry, the number of employees, the acreage occupied, and the degree of dependence upon good roads. The table opposite gives some of the results totaled for the incorporated cities.

SUMMARY OF INDUSTRIAL SURVEY

Practically every industry visited was found to be a constant user of the highway system, not only for convenience of access but because a large proportion of raw and finished materials were handled by truck. The Valley is not intensively developed to industry. Light manufacturing establishments prevail, the only industries classified as "heavy" being the rock-crushing establishments. The Map Insert shows the location of existing industries, the areas now zoned for industrial uses, and certain lands which have potential value as industrial property. No attempt is made *here* to go into the details of zoning for industry, or to outline the work already accomplished by the Industrial Trackage Committee of the Los Angeles Chamber of Commerce in an effort to find ways to preserve land for this purpose. Population comes with industry, and industry needs good highways. This indicates the close relationship that exists between zoning, the industrial situation, and the design of the highway system.

PER CENT OF AREA DEVOTED TO INDUSTRIES
SAN GABRIEL VALLEY CITIES

City	Population	Total Area (Acres)	Number of Industries	Area Devoted to Industry		
				Total Acreage	% of Improved City Area	% of Total City Area
Alhambra	33,650	3970	33	119.0	8.80	3.0
Arcadia	6,800	6210	6	8.5	3.9	0.2
Azusa	7,000	2600	4	150.0	*60.0	5.7
Claremont	3,500	2180	3	54.0	10.0	2.4
Covina	5,000	551	none	0.0	0.0	0.0
El Monte	4,500	730	5	9.7	5.3	1.3
Glendora	4,600	1395	4	7.5	4.2	0.5
La Verne	2,800	800	4	8.0	6.4	1.0
Monrovia	13,000	5060	12	21.1	2.6	0.4
Monterey Park	8,000	3200	none	0.0	0.0	0.0
Pasadena	83,500	11320	19	39.1	1.3	0.4
Pomona	25,660	8000	15	18.5	1.8	0.2
San Gabriel	6,000	1920	none	0.0	†0.0	0.0
San Marino	2,500	2240	none	0.0	†0.0	0.0
Sierra Madre	6,000	1881	none	0.0	†0.0	0.0
South Pasadena	15,000	2120	7	17.0	2.7	0.8
West Covina	800	5120	none	0.0	‡0.0	0.0
				Average	9.73%	1.45%

* All Rock Crushers.
‡ All Agricultural.
† All Residential.

SETBACK AND BUILDING LINES

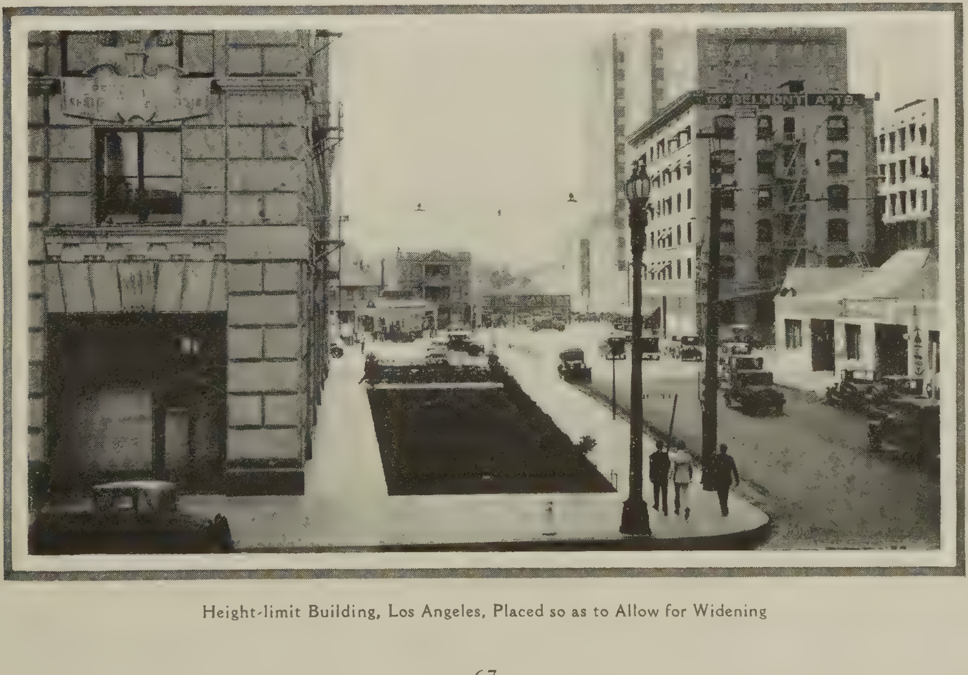
Setback on Atlantic Boulevard, Alhambra

Closely allied to the subject of zoning, and exceedingly valuable as a means of preventing excessive costs in the establishment of major highways, is the matter of setback and building lines. Voluntary cooperation in setting back of permanent structures, where future widening is known to be included in the Plan, has been frequently given by builders throughout the County. Several illustrations of this are shown. *It is necessary to distinguish carefully between setback lines and building lines.* *A setback* is a line established by ordinance or by private agreement to prevent the erection of buildings within a certain distance of the property line. Its object is to create esthetic values, as well as to provide for additional light, air and privacy. It is usually applied to residential blocks. *The building line*, on the other hand, is a line established by ordinance, usually in business and apartment house districts, to provide for sufficient light and air where

Setback on Garvey Avenue, Monterey Park

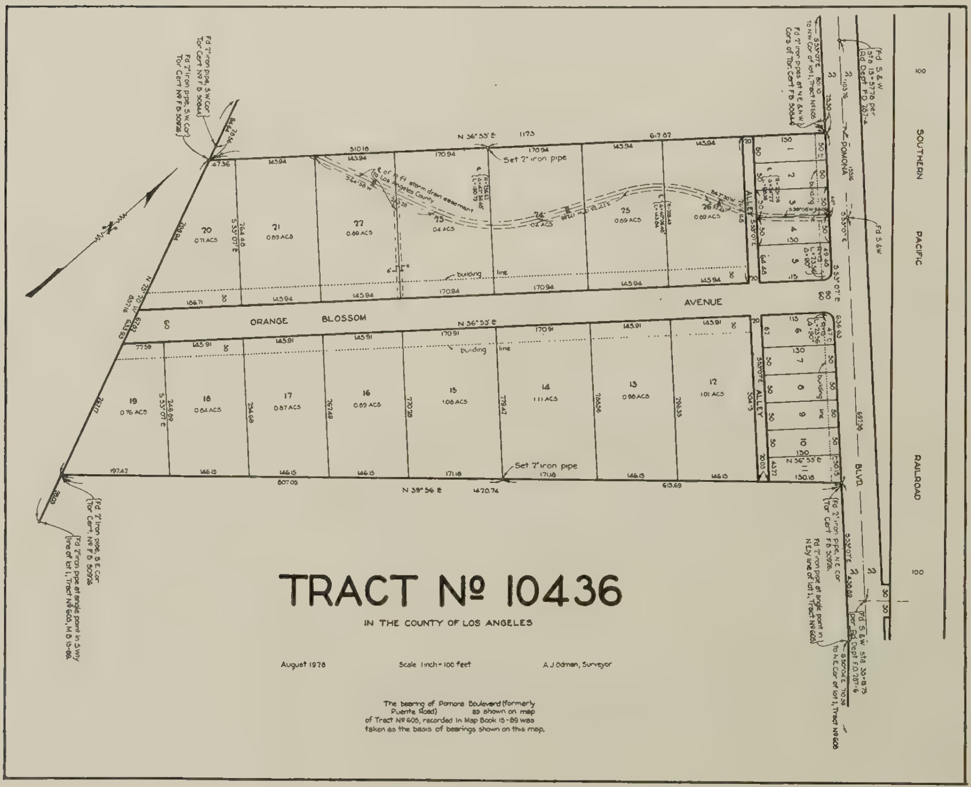
Deep Setback in a Residential District

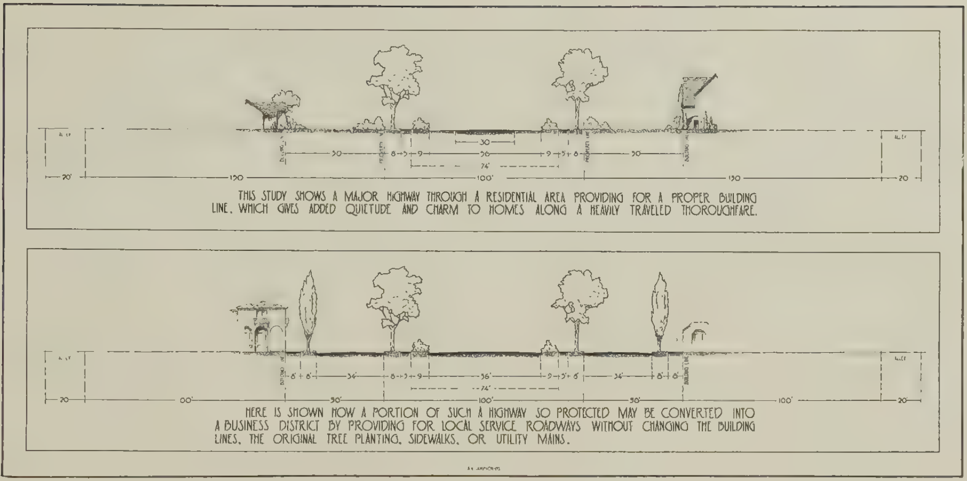
congestion is anticipated or exists. Without its use, many streets which are too narrow would be without sufficient provision for the circulation of fresh air, so necessary to public health. The major street plans of cities ought to be, and frequently are, protected by such ordinances in the interest of public health and general welfare. This often results at the same time in a very considerable economy in the carrying out of street widening



Height-limit Building, Los Angeles, Placed so as to Allow for Widening programs. There is ample legal authority for the establishment of both setback and building lines under the police power. A few of the more important cases are as follows:

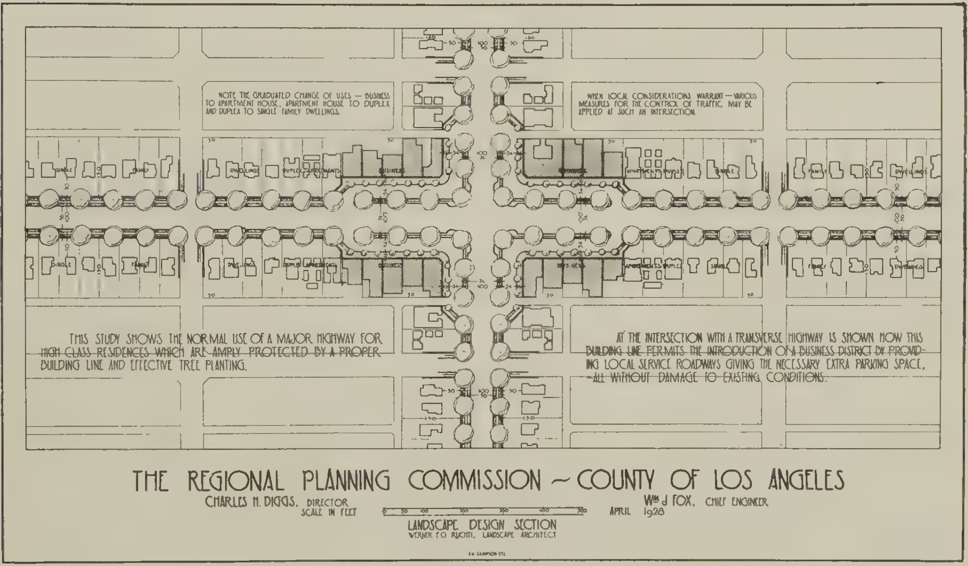
(1) Matter of Wulfsohn v. Burden, 214, App. Div. 824, 210 N. Y. S. 941, 241 N. Y. 288, 150 N. E. 120;
(2) Herman v. Walsh, Sup. Ct., Kings County, N. Y. L. J. Dec. 7, 1926, 220 App. Div. 773;
(3) Friedlander v. 465 Lexington Ave. Inc., Sup. Ct., Westchester County, Mt. Vernon Argus Jan. 6, 1927, 222 App. Div. 689 (N. Y.);
(4) Matter of 465 Lexington Ave., Inc. v. Burden, Sup. Ct. Westchester County, June 9, 1925 (N. Y.);
(5) Pritz v. Messer, 112 Ohio St. 628, 149 N. E. 30, 113 Ohio St. 706, 150 N. E. 756;
(6) State ex rel. Ball v. Harris, C. P. Court, Trumbull County, Jan. Term, 1926, Harris v. State ex rel. Ball, 23 Ohio App. 33, 155 N. E. 166;
(7) Weiss v. Guion, 17 Fed. (2d) 202 (Ohio);
(8) Kaufman v. City of Akron, C. P. Ct., Summit Co., Jan. 6, 1927 (Ohio).





THIS STUDY SHOWS A MAJOR HIGHWAY THROUGH A RESIDENTIAL AREA PROVIDING FOR A PROPER BUILDING LINE, WHICH GIVES ADDED QUIETUDE AND CHARM TO HOMES ALONG A HEAVILY TRAVELED THOROUGHFARE.

HERE IS SHOWN HOW A PORTION OF SUCH A HIGHWAY SO PROTECTED MAY BE CONVERTED INTO A BUSINESS DISTRICT BY PROVIDING FOR LOCAL SERVICE ROADWAYS WITHOUT CHANGING THE BUILDING LINES, THE ORIGINAL TREE PLANTING, SIDEWALKS, OR UTILITY MAINS.



NOTE THE GRADUATED CHANGE OF USES — BUSINESS TO APARTMENT HOUSE, APARTMENT HOUSE TO DUPLEX AND DUPLEX TO SINGLE FAMILY DWELLINGS.

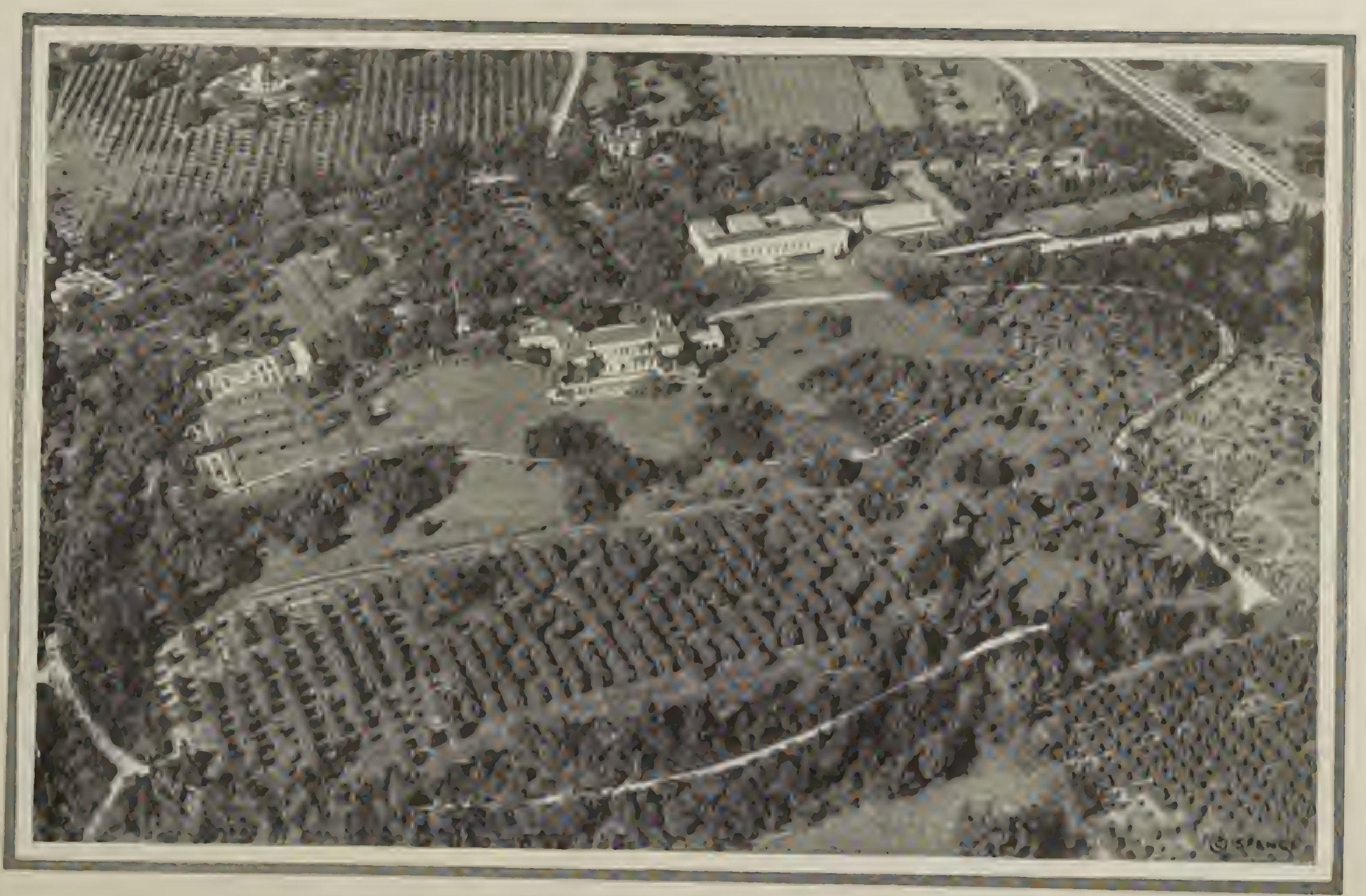
WHEN LOCAL CONSIDERATIONS WARRANT — VARIOUS MEASURES FOR THE CONTROL OF TRAFFIC MAY BE APPLIED AT SUCH AN INTERSECTION.

THIS STUDY SHOWS THE NORMAL USE OF A MAJOR HIGHWAY FOR HIGH CLASS RESIDENCES WHICH ARE AMPLY PROTECTED BY A PROPER BUILDING LINE AND EFFECTIVE TREE PLANTING.

AT THE INTERSECTION WITH A TRANSVERSE HIGHWAY IS SHOWN HOW THIS BUILDING LINE PERMITS THE INTRODUCTION OF A BUSINESS DISTRICT BY PROVIDING LOCAL SERVICE ROADWAYS GIVING THE NECESSARY EXTRA PARKING SPACE, —ALL WITHOUT DAMAGE TO EXISTING CONDITIONS.

THE REGIONAL PLANNING COMMISSION ~ COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J FOX, CHIEF ENGINEER
APRIL 1928
LANDSCAPE DESIGN SECTION
WERNER F.O. RUCHTI, LANDSCAPE ARCHITECT

Many building lines have already been established by ordinance in County territory as well as in many of the cities of this County, and have been very generally approved by the property owners involved. The Zoning Section, in issuing permits for new buildings, keeps careful watch on building lines established by ordinance, and is also frequently able to secure voluntary setbacks in accordance with the plan in places where the building lines have not yet been established by law. The Landscape Design Section has made

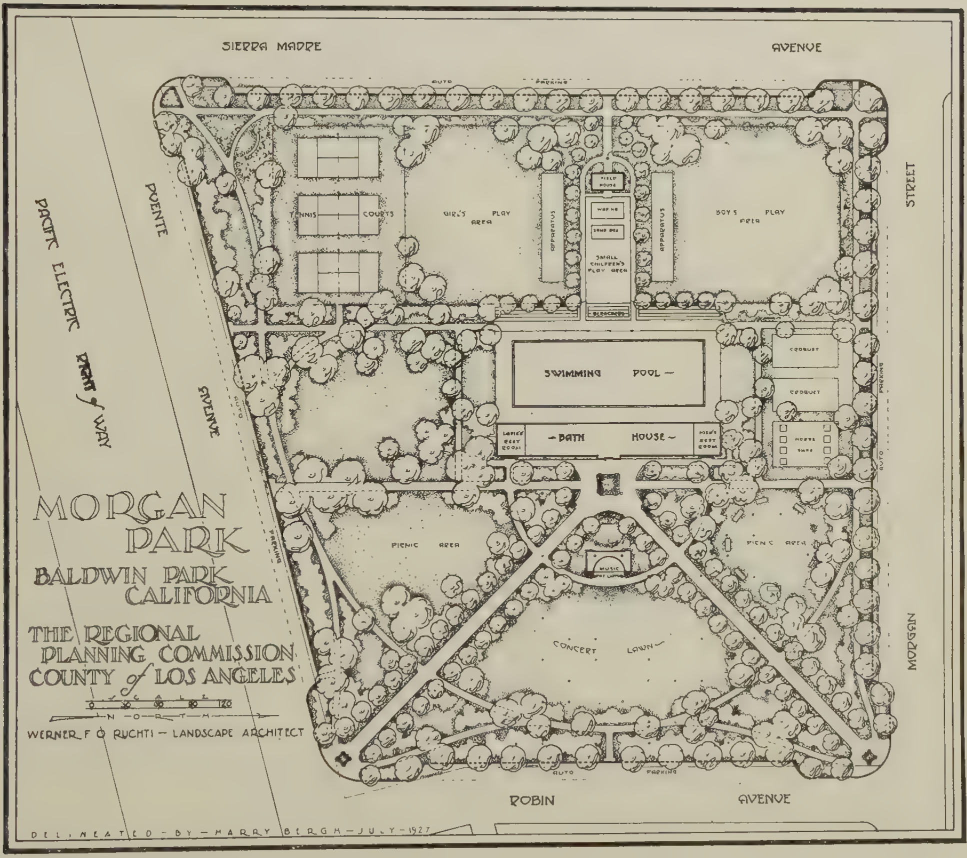


THE HUNTINGTON ESTATE, SAN MARINO

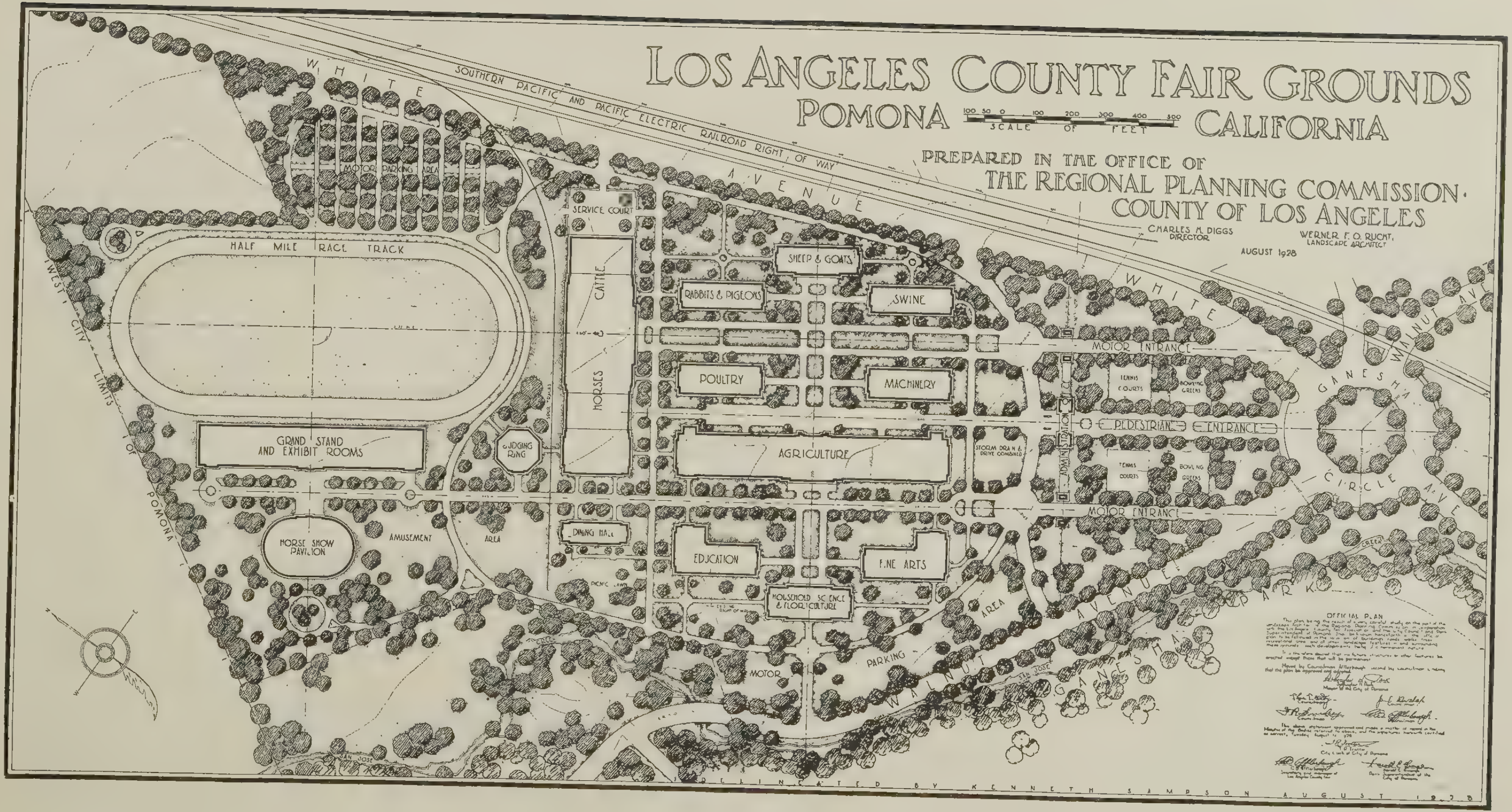
studies showing the advantages of deep lots and of setbacks near major intersections. The Subdivision Section has encouraged the recording of building lines in residential subdivisions with very good results. An example of such a recordation is shown.

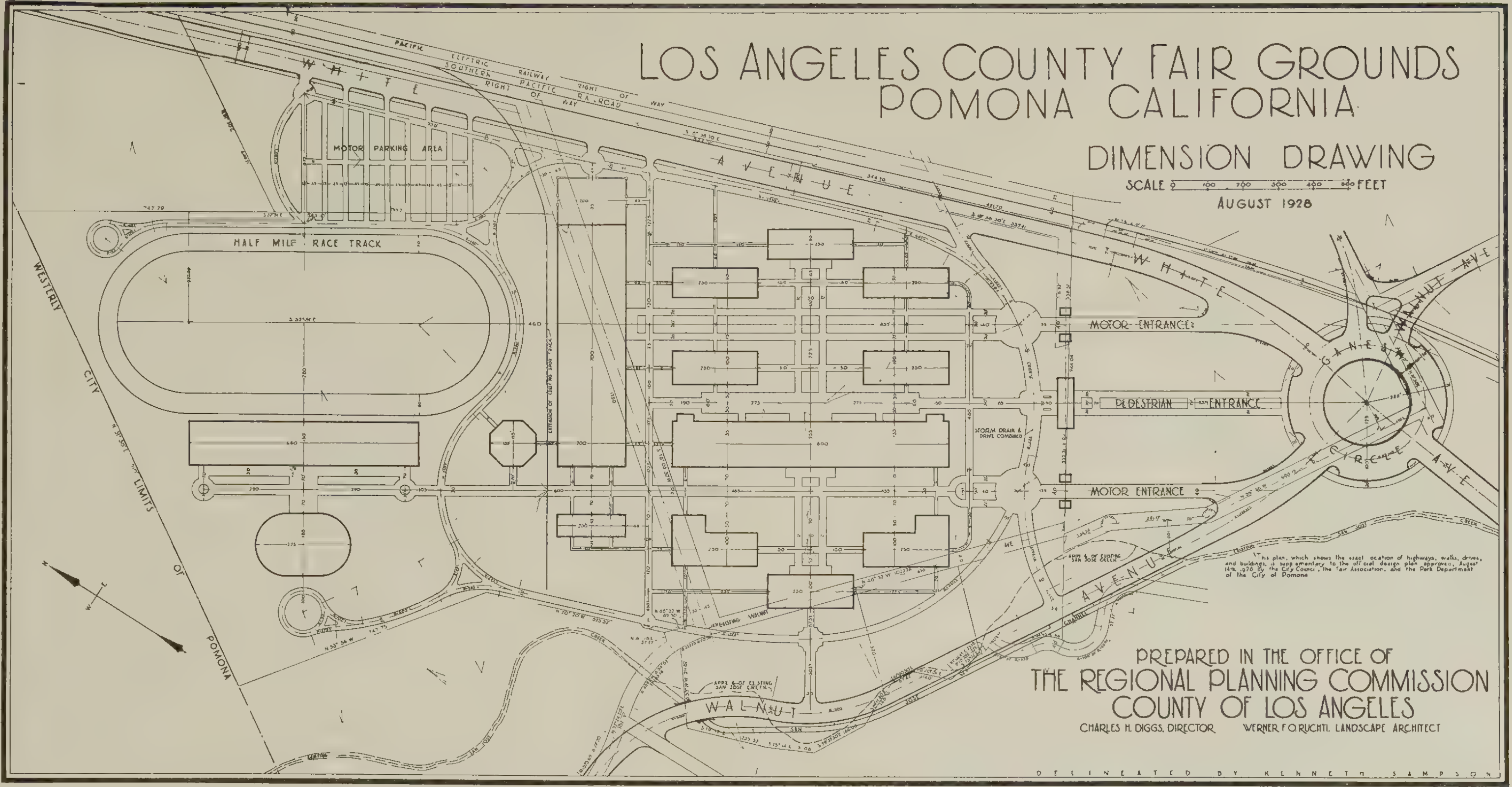
THE HIGHWAY PLAN AND THE LANDSCAPE ARCHITECT

The range of professional talent employed in regional planning must be broad in proportion to the magnitude of the problems involved. It is necessary to call upon legal advisers, and the architect is frequently in demand. But perhaps the most closely allied profession is that of the landscape architect, who brings to the practical, rough and ready design of the engineer the welcome aid of a man trained in the application of the principles of proportion and balance, and accustomed to the freer use of creative



Plan for a Recreational Center, Baldwin Park


LOS ANGELES COUNTY FAIR GROUNDS
POMONA CALIFORNIA
100 50 0 100 200 300 400 500
SCALE OF FEET
PREPARED IN THE OFFICE OF
THE REGIONAL PLANNING COMMISSION·
COUNTY OF LOS ANGELES
CHARLES H. DIGGS
DIRECTOR
WERNER F. O. RUCHT,
LANDSCAPE ARCHITECT
AUGUST 1928
SOUTHERN PACIFIC AND PACIFIC ELECTRIC RAILROAD RIGHT OF WAY
WHITE AVENUE
WHITE
MOTOR PARKING AREA
SERVICE COURT
HALF MILE RACE TRACK
WEST CITY LIMITS OF POMONA
CATTLE
HORSES
GRAND STAND AND EXHIBIT ROOMS
JUDGING RING
SHEEP & GOATS
RABBITS & PIGEONS
SWINE
POULTRY
MACHINERY
AGRICULTURE
STORM DRAIN & DRIVE COMBINED
ADMINISTRATION
TENNIS COURTS
BOWLING GREENS
MOTOR ENTRANCE
PEDESTRIAN ENTRANCE
GANESHA CIRCLE
WALNUT AVE
DINING HALL
EDUCATION
FINE ARTS
HOUSEHOLD SCIENCE & FLORICULTURE
HORSE SHOW PAVILION
AMUSEMENT AREA
PICNIC LAWN
MOTOR PARKING AREA
WALNUT AVENUE
GANESHA PARK
CREEK
SAN JOSE
OFFICIAL PLAN
DELINEATED BY KENNETH SAMPSON AUGUST 1928



LOS ANGELES COUNTY FAIR GROUNDS
POMONA CALIFORNIA

DIMENSION DRAWING

SCALE 0 100 200 300 400 500 FEET

AUGUST 1928

This plan, which shows the exact location of highways, walks, drives, and buildings, is supplementary to the official design plan approved, August 14th, 1928 by the City Council, the Fair Association, and the Park Department of the City of Pomona

PREPARED IN THE OFFICE OF
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR WERNER F.O. RUCHTI, LANDSCAPE ARCHITECT

DELINEATED BY KENNETH SAMPSON

PACIFIC ELECTRIC RAILWAY RIGHT OF WAY
SOUTHERN PACIFIC RAILROAD RIGHT OF WAY
WHITE AVENUE
MOTOR PARKING AREA
HALF MILE RACE TRACK
MOTOR ENTRANCE
PEDESTRIAN ENTRANCE
MOTOR ENTRANCE
STORM DRAIN & DRIVE COMBINED
GANESHA CIRCLE
WALNUT AVE
WALNUT AVENUE
EXISTING SAN JOSE CREEK
APPROX. & OF EXISTING SAN JOSE CREEK
WESTERLY CITY LIMITS OF POMONA
N

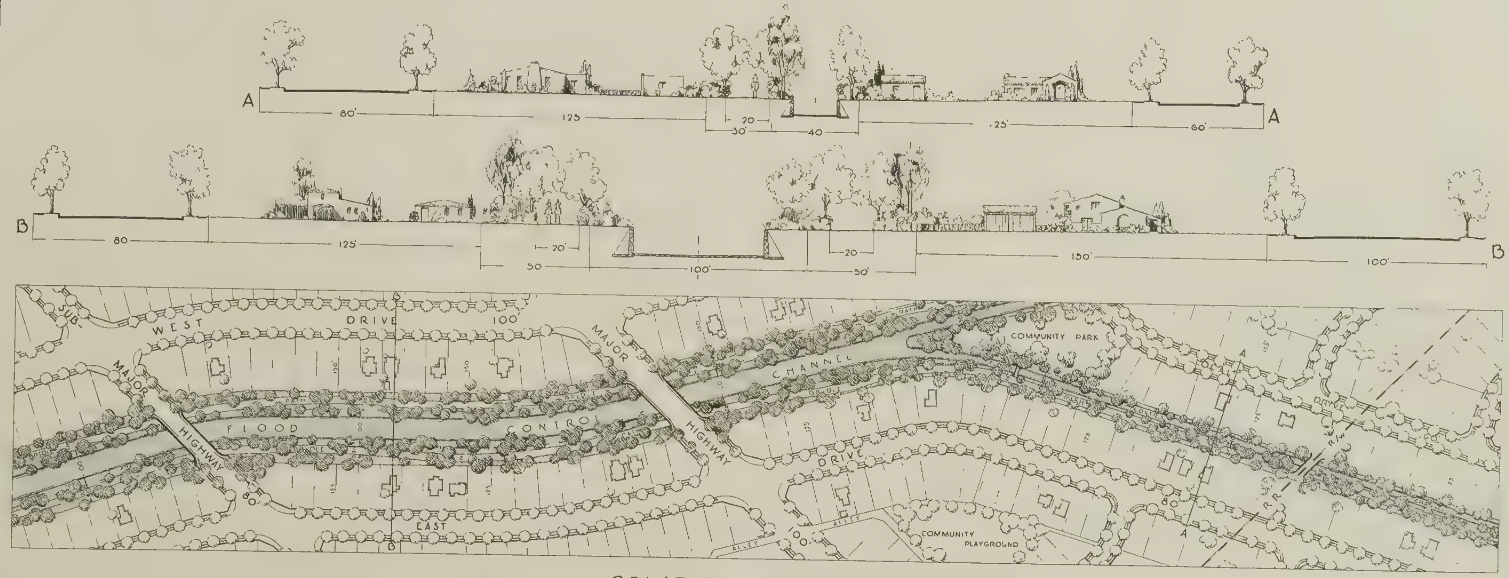
imagination. The practical and necessary considerations of utility, efficiency and economy have too frequently over-shadowed the claims of beauty and harmony in the design of public works. There is no need for our environment to be ugly. A growing determination is manifest that our cities and our country-side shall be beautiful even though the cost be greater. In the past the design of a bridge or other structure has too often been solely based on such technical factors as stresses, impacts dead and live loads, and the strength of materials. It is true that once these were known, the structure could be designed to carry the required loads without consideration of its final appearance. But if the same structure is so designed as to be graceful in its lines and to radiate a feeling of strength and stability because of its architectural correctness, the citizens and taxpayers, who know nothing of stresses and strains, will forever point to it with pride as a civic asset. It costs but little to add character and beauty to the inward qualities of structural safety and ample capacity, and the results are of the highest importance, fostering community pride and guiding civic development. The engineer who designs a street system or even a single highway without having availed himself of the knowledge and ability of the landscape architect is sure to fall short of the most effective achievement. Road building has attained the rank of a science, but it can never claim to be one of the fine arts until each highway is studied in its relation to the landscape of which it is a part. This is equally true in such matters as the intersection of highways and in the subdivision of land. The Landscape Design Section of this Commission has rendered valuable service of this sort, demonstrating that utility and economic values need not be sacrificed to obtain distinctive design and pleasing effect.

PLAN OF THE LOS ANGELES COUNTY FAIR GROUNDS

The two drawings of the Los Angeles County Fair Grounds at Pomona were prepared by the Landscape Design Section in connection with the location of certain new buildings and proposed additions. There was a program calling for the expenditure of a large sum of money for expansion during a period of years. It was apparent from the start that such a program could not be undertaken without having some carefully prepared and well-designed plan. The Landscape Design Section devised such a plan, setting forth the correct location not only for a building to be immediately constructed, but for all the buildings which would compose the project as finally developed. Thus the proper authorities have been given sufficient information to begin building on a year to year program with confidence that all construction will fit the general plan, and that changes, relocations and alterations will be reduced to a minimum.

BRIDLE PATHS DEVELOPING ALONG WASHES

From the standpoint of subdivision development, the numerous dry washes or channels in the San Gabriel Valley have been considered a detriment to values, but the truth is that these washes offer great possibilities for reforestation and planting, which if carried out would considerably enhance the value of adjoining property. Horseback riding is becoming more and more popular in this section and these stream beds offer an appropriate place for the development of bridle paths. Such a plan not only offers the wild and natural environment that is so desirable, but permits the bridle paths to pass under the various bridge structures so that the mount need not cross heavy-traffic thoroughfares. This gives a sense of security to the equestrian, and increases the enjoyment of horseback riding. The proper landscape treatment of the wash itself, with the added feature of the bridle path, has a very desirable effect on the value of adjoining property. The Landscape Design Section has been of great assistance in making the designs shown on page 76, which indicate some of the possibilities of this type of development in the San Gabriel Valley. This plan is already being worked out in some portions of the Valley. In this work as well as in the design of subdivision layouts, such as that shown on page 54, the Landscape Design Section keeps closely informed as to the Highway Plan, contributes to its development, and assists in its realization.



RELATIONSHIP STUDY
BRIDLE PATHS, FLOOD CONTROL CHANNELS, MAJOR & SUB-MAJOR HIGHWAYS, LOCAL STREETS, AND SUBDIVISION OF LAND

SCALE OF CROSS-SECTIONS
SCALE OF PLAN

PREPARED IN THE OFFICE OF
THE REGIONAL PLANNING COMMISSION - COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
WM J FOX, CHIEF ENGINEER
LANDSCAPE DESIGN SECTION —— WERNER RUCHTI, LANDSCAPE ARCHITECT
JUNE 1929

NOTE THESE PLANS SUGGEST DEVELOPMENT ALONG WASHES AND FLOOD CONTROL CHANNELS. CAREFUL PLANNING USES EXISTING CONDITIONS TO CREATE VALUABLE ASSETS

RELATION TO OTHER MEANS OF TRANSPORTATION

A major consideration which must not be lost sight of in preparing a regional plan of highways is the relation between those highways and other means of transportation of persons and goods. There must be proper relation to established and future lines of movement, by rail, air and water. Transportation by water is of course only indirectly involved in the San Gabriel Valley Highway Plan. But rail and air transportation, the one long a factor to be reckoned with, and the other a new challenge to our ability as planners, have both been given a large place in the deliberations leading up to the adoption of this Plan.

THE HIGHWAY PLAN AND THE RAILROADS

Probably the most serious problem encountered in making the San Gabriel Valley Highway Plan was that of coordination with the railroads and the resulting complication where highways and railroads cross. Its treatment is of such importance as to warrant the detailed analysis which follows:

GRADE CROSSING CONTROL IN THE SAN GABRIEL VALLEY

AUTOMOBILES AND RAILROADS BOTH ESSENTIAL

The automobile industry has developed rapidly in the past twenty-five years and is now one of the largest in the country. In some respects, it is competitive to the railroads in passenger and freight transportation. Whether competitive or not, these two national transportation essentials should be thoroughly coordinated. Both are needed—each should be developed without sacrifice of the other. "The political unity of the United States was preserved largely by the railways, which alone make communication between parts of so vast a commonwealth practicable and convenient", says Ralph Budd, President of the Great Northern Railroad. "Without them, people in some sections of the country might have found it more advantageous to trade with foreigners than at home. And in a continent where national lines were forming, allegiance might have followed the course of commerce". The railroads are as essential today to the national and commercial life of the United States as they ever were, and anything that would jeopardize their success or efficiency should be avoided as a public menace.

RELATIVE TRAFFIC VOLUME AND CAPITAL INVESTMENT

Not so many years ago rail traffic was presumed to have the right-of-way in the matter of traffic movements because of its superiority as to (1) the tonnage of rolling stock, (2) the number of passengers carried, (3) the actual number of vehicle units, and (4) the tonnage of freight hauled. Today, however, the situation is somewhat different and is, in fact, reversed in many respects. For instance, we find on the side of vehicular traffic (1) more rolling stock, (2) more passengers carried, and (3) more vehicle units. Freight tonnage is still less than that carried by rail. In 1920 the total capital investment of railroads and equipment in the United States was $22,000,000,000. For the same year the investment in highways and motor vehicles was $13,800,000,000. In 1917 the following condition was observed:

Railways and Equipment

Miles	251,000
Total Units	2,567,000
Investment	$25,000,000,000
Annual Cost	$ 6,310,000,000

Improved Highways and Motor Vehicles

Miles	495,000
Total Units	20,000,000
Investment	$25,000,000,000
Annual Cost	$12,125,000,000

It is evident from these figures that as far as the number of passengers carried and the investment involved are concerned, vehicular traffic is certainly at least on a par with railroad traffic. Therefore, in dealing with matters which affect both means of travel jointly, each should be given full consideration.

EVERY GRADE CROSSING A POTENTIAL HAZARD

In the matter of grade crossings, a situation exists where rail traffic and vehicular traffic must both use the same ground. The factors to be considered in dealing with all such crossings can be enumerated as follows:

1. The frequency of grade crossings should be commensurate with the public convenience and necessity, having due regard for the railroads' position as an indispensable factor in our commercial and economic world.
2. It should be recognized that every grade crossing is a potential hazard and a source of great economic losses in the form of loss of life, accidents, delays and traffic congestion.
3. Where crossings at grade unavoidably exist, we should strive to prevent these two mediums of transportation from occupying the same space *at the same time.*
4. Equitable consideration should be given to the safe and expeditious movement of both rail and vehicular traffic.
5. Crossings of rail lines should be permitted only on important thoroughfares that carry large volumes of motor vehicle traffic.
6. Because of the tremendous amount and ever-increasing size of vehicular traffic loads and of the loss of life and other economic losses due to grade crossing accidents and delays, the grades of highways should be separated from those of railroads wherever and whenever economically possible.

PRINCIPLES OF GRADE CROSSING CONTROL

In view of these factors, it is evident that successful control of grade crossings can only be had by the adoption of certain definite principles of procedure. These may be summarized as follows:

1. A comprehensive plan of actual and proposed major and secondary highways should be prepared by the proper authorities and officially adopted.
2. Using this comprehensive plan as a basis, a program of grade crossings should be prepared, providing for the establishment of new crossings only where absolutely necessary and for the abandonment of unessential, unimportant and dangerous crossings.
3. A systematic program of grade separation projects at designated locations should be prepared and a financial program should be set up for carrying it out.
4. A definite amount of money should be set aside each year for the carrying out of this grade separation program.
5. Grade crossings in the vicinity of grade separations should be closed and traffic directed through the underpass or overpass structure.
6. New crossings should not be granted or permitted at grade until public necessity and conformity with the comprehensive plan have been established.
7. Regular conferences should be held with public officials in order that they may become familiar with these problems and with the plan, use their influence to secure the closing of unnecessary crossings under their jurisdiction, and be encouraged to foster a program for the separation of grades where economically feasible.

HIGHWAY PLAN A NECESSARY BASIS

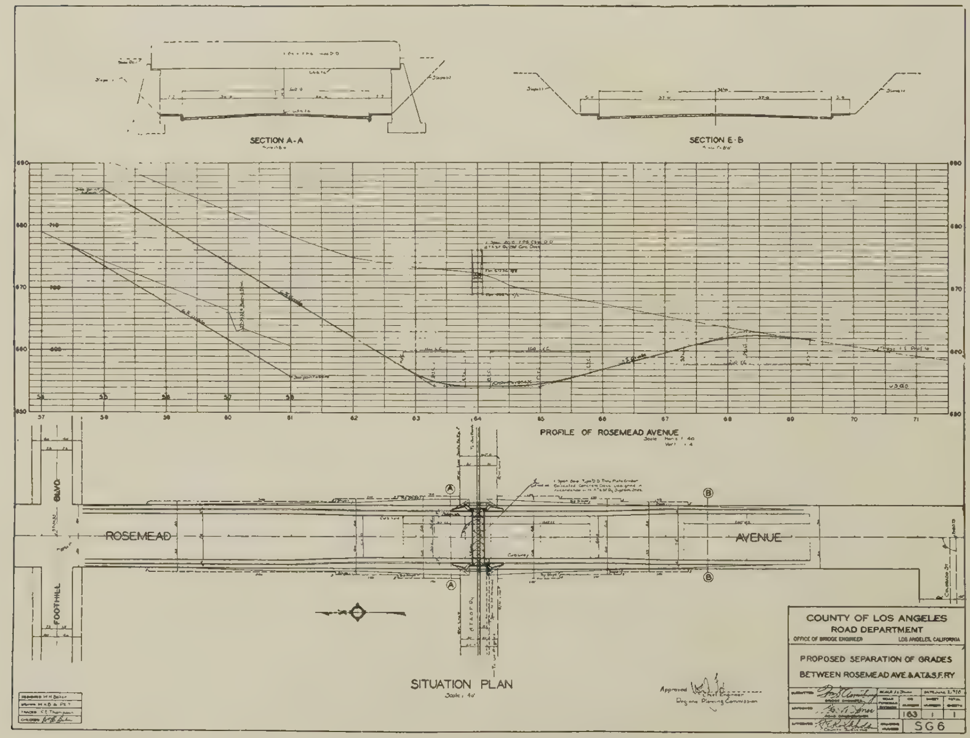
The basis for dealing with grade crossings and grade separations, either actual or proposed, is thus seen to be a comprehensive plan of the existing and proposed major and secondary highways, covering a large area. It is impossible to fairly and intelligently deal with a single application for a grade crossing or grade separation without knowing what the city, county or state authorities plan as the ultimate development of through highways for the locality. A zoning plan setting forth the predetermined uses of adjacent property is also extremely valuable. When such plans are available, all grade crossings should be confined to the major and secondary thoroughfares except where others are necessary for fire protection or some other absolute established public necessity. In determining such public necessity, it should certainly be considered that the movement of traffic over a railroad is a public necessity of prime importance. Railroads have been and still are the backbone of commercial and industrial development, and anything which retards or jeopardizes free and expeditious movement of trains will have a similar reactionary effect on all business, social and commercial enterprises.

EXCESSIVE NUMBER OF GRADE CROSSINGS

The most casual survey of existing grade crossings will indicate that we have gone wild in the matter. Crossings exist at many hazardous locations where they are not needed, and a great many new ones are being constantly opened. Little or no effort is being made to close unimportant crossings. It has been found that in the San Gabriel Valley, an area of approximately 250 square miles, there are now (July, 1929) 460 railroad crossings. A survey of these brings out the surprising fact that 50 percent are at unimportant locations and are of little or no general public convenience. If the present tendency is allowed to continue, and crossings are permitted at local and unimportant streets, approximately 3000 crossings will exist when the Valley reaches its ultimate development.

NEED FOR PROPER CONTROL

This analysis indicates that without strict cooperative grade crossing control, there will be six times as many crossings as are necessary in that area. If this should happen, each major railway line, whether steam or electric, would become, in effect, nothing but a local street car line, and would be rendered practically useless as a medium of transportation for either passengers or freight. The two tables which follow summarize the present situation and indicate that if all projects included in the ultimate highway plan for the Valley, as proposed by the Regional Planning Commission, are carried to completion, there will be needed only 274 crossings of all rail lines, or less than 60 percent of the number now in existence.



Details for an Underpass Structure

Existing Grade Crossings and Grade Separations

Railroad	Mileage	Grade Crossings	Grade Separations
Pacific Electric	77.27	140	3
Southern Pacific	54.35	154	1
Santa Fe	30.11	103	4
Union Pacific	11.36	63	8
Totals	173.09	460	16

The Map Insert shows the ultimate highway plan of this Valley and the location of all existing and proposed grade crossings and grade separations as related thereto. It is evident from a study of this map that if crossings were confined to the important thoroughfares as suggested and kept under proper control, it would be reasonable to hope that all might eventually be separated in grade. This does not mean that the separation of grade at 274 crossings is proposed for immediate or early execution.

COST OF SEPARATING GRADES

It is reasonable to assume that some of the roads and consequently some of the grade separations will not be needed until the Valley approaches its final development. The population curve for the San Gabriel Valley indicates that there will be 900,000 people living there in 1960, the population now being 250,000. It is estimated that the ultimate population of the same area will be approximately 3,000,000. Therefore, if in thirty years, the population increases from 250,000 to 900,000, it will be approximately 130 years before the saturation point is reached. For the sake of convenience, let us assume that the road system will be all constructed thirty years before this. We then

Highway Crossings—Present and Future

Railroad	Existing Crossings		Proposed Crossings	
	Major Highway	Secondary Highway	Major Highway	Secondary Highway
Pacific Electric	32	37	12	14
Southern Pacific	39	42	5	10
Santa Fe	13	29	6	8
Union Pacific	10	13	1	3
	94	121	24	35
Totals		215		59
Grand Total				274

have 100 years as a time interval in which to develop a major road system in accordance with the population growth, and the same interval may naturally be allowed for the completion of the full program of grade separations, as shown in the following table:

Annual Cost of Grade Separation Program

274 crossings at average of $200,000 each	$54,800,000
Over 100-year period, or about 3 crossings per year (per year)	548,000
50% of cost to railroads (per year)	274,000
50% of cost to public (per year)	274,000

Surely this is not an unreasonable annual expenditure for the purpose of separating the grades of highways and railroads in the interest of public safety and convenience. These calculations are based upon the assumption that all the crossings listed will be separated, which, of course, is not the case, as many are on industrial spur-tracks where the expense would not be justified. The analysis does show, however, that even an extreme program of grade separating can be economically carried out if sufficient attention is given to controlling the number of grade crossings, and that it is economically possible to separate the grades of all main highway crossings on all high-speed railway lines if a comprehensive program is set forth and followed.

TEN YEAR PROGRAM FOR GRADE SEPARATIONS

In order to substantiate these conclusions a tentative ten-year program for the separation of grades throughout Section 2-E (the San Gabriel Valley) is suggested in the table on the following page. The projects in this program are so allotted as to allow a network of highways to be established over the Valley with no crossing over any high-speed railway line at grade. The choice of locations was made from the comprehensive highway plan of the Regional Planning Commission, in an effort to select projects the completion of which will do the greatest good to the greatest number during the next decade. Each one is upon a well-established highway serving an area which already contributes a very heavy traffic flow. Subsequent programs should be prepared and carried out. Highway and grade separation construction may then be synchronized with maximum results as to public safety, convenience and economy.

ECONOMIC SOUNDNESS OF PROGRAM

In accordance with this ten-year program, the total cost, $5,350,000, equally divided, would mean a cost of $535,000 per year, or at the rate of two separation projects each year. Assuming arbitrarily that 50% of this cost would be paid by the railroad companies and 50% by the public, we have the following:

TEN-YEAR GRADE SEPARATION PROGRAM

No.	Name of Highway	Railroad	Location	Estimated Cost
1	Atlantic Blvd.	P. E.-(Covina Line)	Alhambra	$350,000
2	Atlantic Blvd.	S. P.	Alhambra	250,000
3	Atlantic Blvd.	P. E. -(Glendora Line)	Alhambra	400,000
4	Rosemead Blvd.	Santa Fe	Lamanda Park	100,000
5	Rosemead Blvd	P. E. -(Glendora Line)		350,000
6	Rosemead Blvd	S. P.	Rosemead	100,000
7	Rosemead Blvd	P. E.-(Covina Line		200,000
8	Myrtle Ave	Santa Fe	Monrovia	150,000
9	Myrtle Ave	P. E.	El Monte	200,000
10	Myrtle Ave	S. P.	El Monte	100,000
11	Irwindale Ave	Santa Fe	W. of Azusa	150,000
12	Irwindale Ave	P. E.	West Covina	200,000
13	Grand Ave., Foothill Blvd.	Santa Fe	Glendora	300,000
14	Grand Ave	P. E.	E. of Covina	200,000
15	San Antonio Ave.	Santa Fe and P. E.	Pomona	250,000
16	San Antonio Ave.	U. P. and S. P.	Pomona	350,000
17	Arrow Highway.	Santa Fe	San Dimas	300,000
18	Foothill Blvd	Santa Fe	Azusa	150,000
19	Huntington Drive.	Santa Fe	Arcadia	300,000
20	Huntington Drive, Colorado St	S. P. and P. E.	Arcadia	250,000
21	Garvey-Holt	S. P.	E. of El Monte	150,000
22	Pomona Blvd.	P. E.	El Monte	300,000
23	Pomona Blvd.	S. P.	Los Angeles	250,000
	TOTAL			$5,350,000

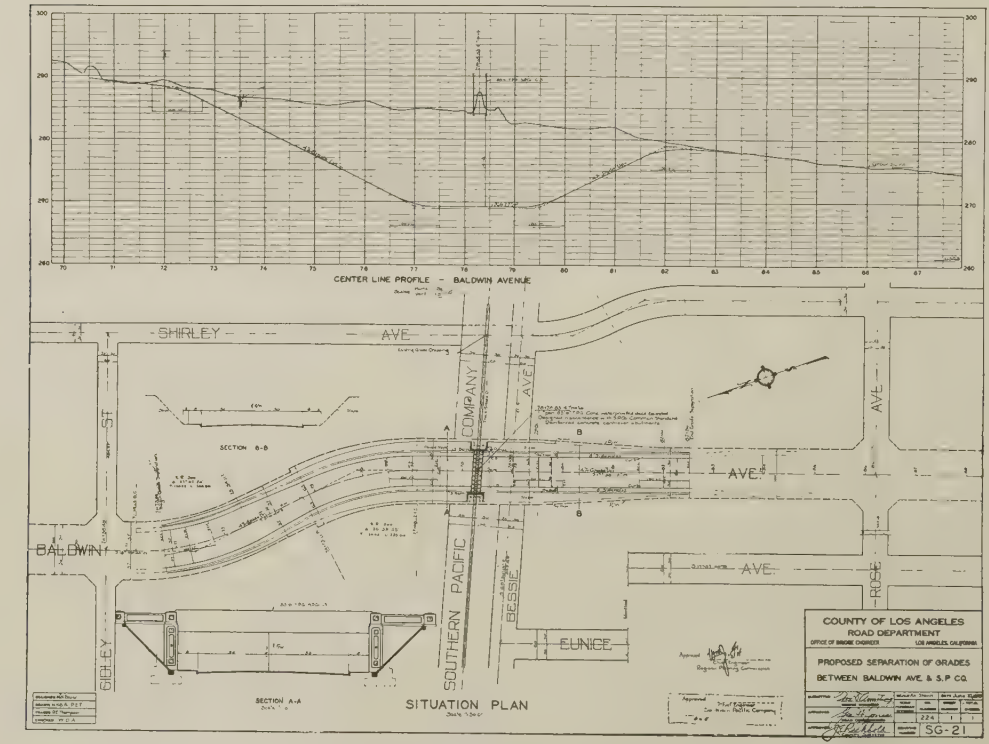
Average Annual Cost

Total Cost of 23 Grade Separations (ten years)	$ 5,350,000
Annual Cost (about 2 separations per year)	535,000
Share borne by Railroads (assumed 50%)	267,500
Share borne by public (assumed 50%)	267,500
Assessed Valuation of area (ten-year mean, estimated)	$600,000,000
Annual Cost per $100 of Assessed Valuation	$ 0.0446

This charge of about 4½ cents per $100 of assessed valuation is certainly a reasonable price to pay for safe highway travel. It means that a piece of property assessed at $10,000 would be charged $4.46 annually to support such a sensible program. Contributions from the State's gasoline tax and other public funds would reduce this amount.

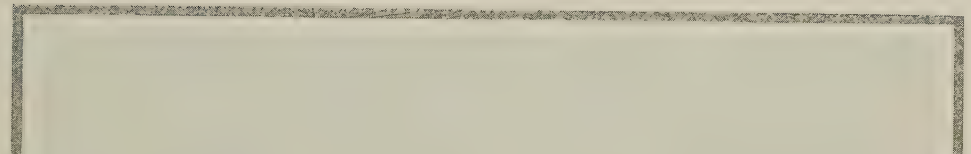
IMPORTANCE OF GRADE CROSSING COMMITTEE'S WORK

The situation in this great Valley is a fair index to the conditions in other parts of Los Angeles County. The Grade Crossing Committee of this County is to be commended for its splendid accomplishments in the matter of grade crossing control and the furthering of grade separation programs. As more information is made available, its work should become more comprehensive, and the original purpose should be kept in mind. It is hoped that this report may be of some assistance in the splendid work of the Committee.



Details of a Grade Separation Structure

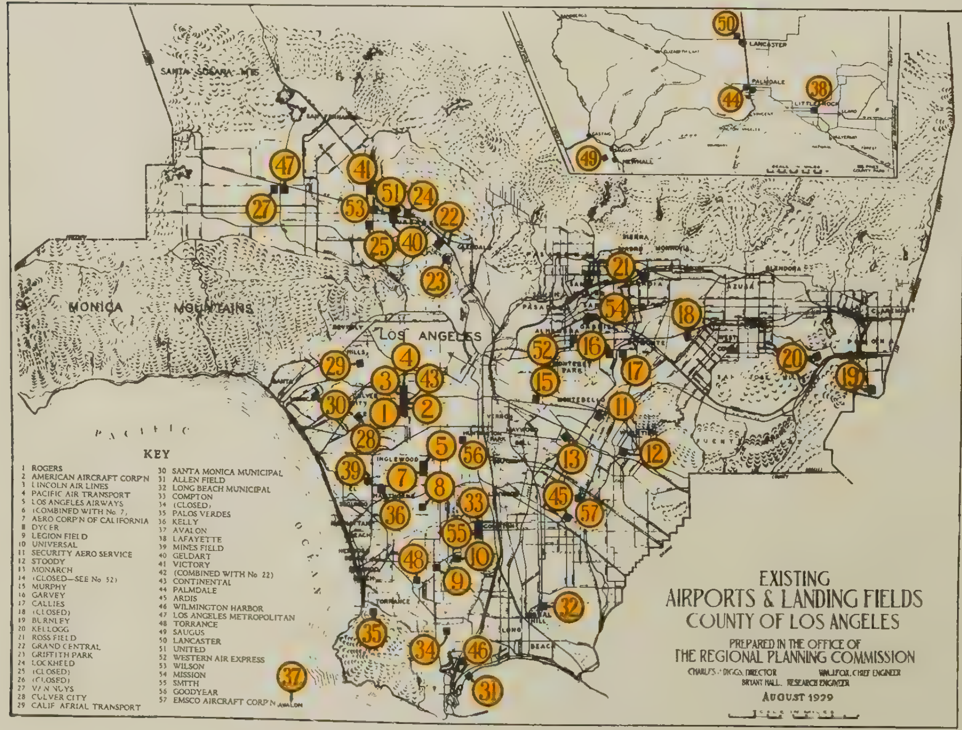
Effective Design Completes the Picture



Provision for Uninterrupted Traffic

THE HIGHWAY PLAN AND AVIATION

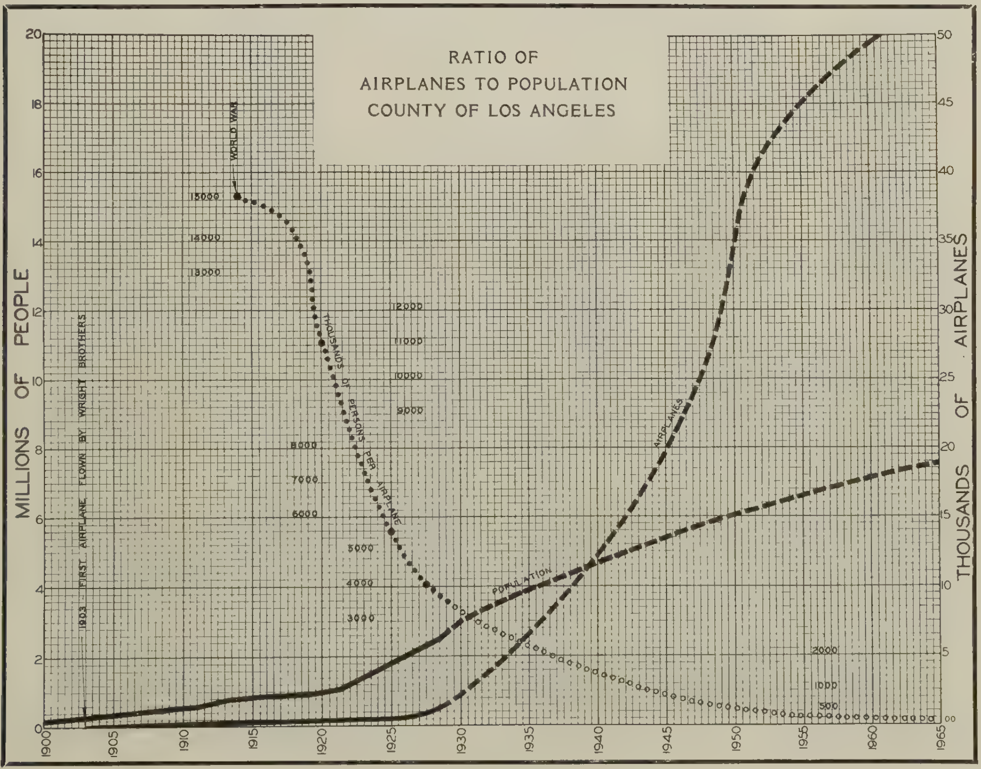
A new factor in transportation, one to the great importance of which the Regional Planning Commission has given full recognition, is found in the recent development of aviation. It is no longer sufficient that the plan made should provide adequately for the automobile; it must also consider the problems of ground facilities for the airplane and the dirigible. Millions are being spent today in widening and straightening streets to care for the unforeseen volume of traffic which followed the development of the automobile. If we repeat this error in our provision for the airplane, we shall be more severely criticized than our predecessors, for this time we are more fully warned of the possibilities involved. The latest figures indicate that there are more airplanes in civilian operation in the United States today than there were automobiles in 1900. We have no means to accurately measure the future extent of aviation, but we have enough data to enable us to make a fair estimate of the provisions that ought to be made for it in the San Gabriel Valley. The present total of heavier-than-air ships of all types in Los Angeles County is 945, or one plane for every 2,500 persons. Indications are that by 1960 this ratio will be reduced to 500 persons per



plane, which would imply the existence of 14,600 airplanes in this county at that time. It may be further estimated that in 130 years, as shown by the accompanying diagram, the number of these machines will be such that there will be one for every 100 persons in the San Gabriel Valley. While these figures are but an estimate, the accompanying table, which forecasts the number of airplanes expected, according to the best information now available, to eventually center about each of the cities of the San Gabriel Valley, is interesting and worthy of careful study. The problem of providing space for the safe operation of these aircraft must be considered *now.* It is even more urgent to plan in advance in this respect than in the case of streets and highways.

PLANNING OF AIRPORTS AND LANDING FIELDS

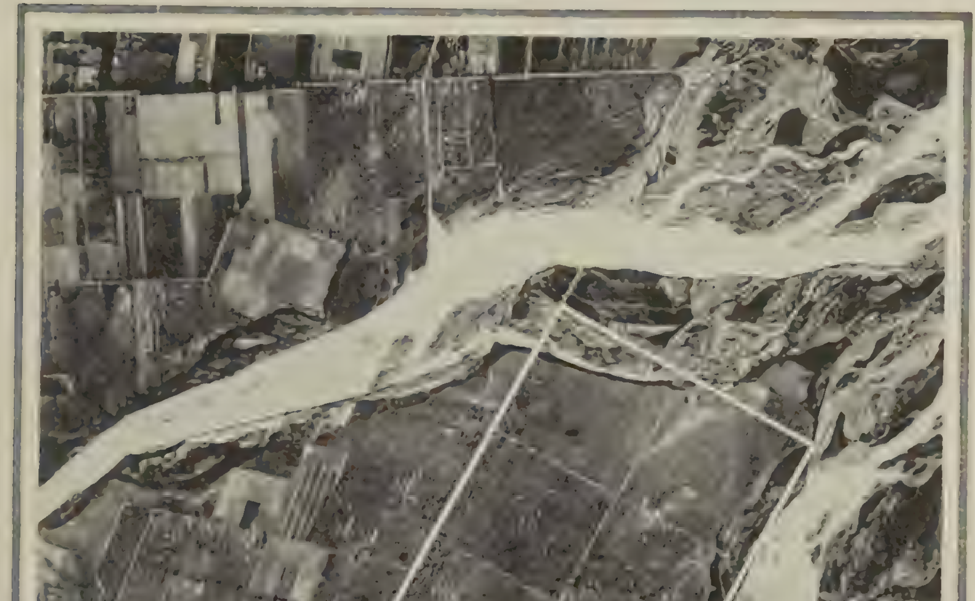
Spaces sufficiently large and otherwise well adapted for landing fields are never too numerous and are fast disappearing under economic pressure. It is essential that, wherever possible, such fields be reserved at once in anticipation of the inevitable development of air transportation. The San



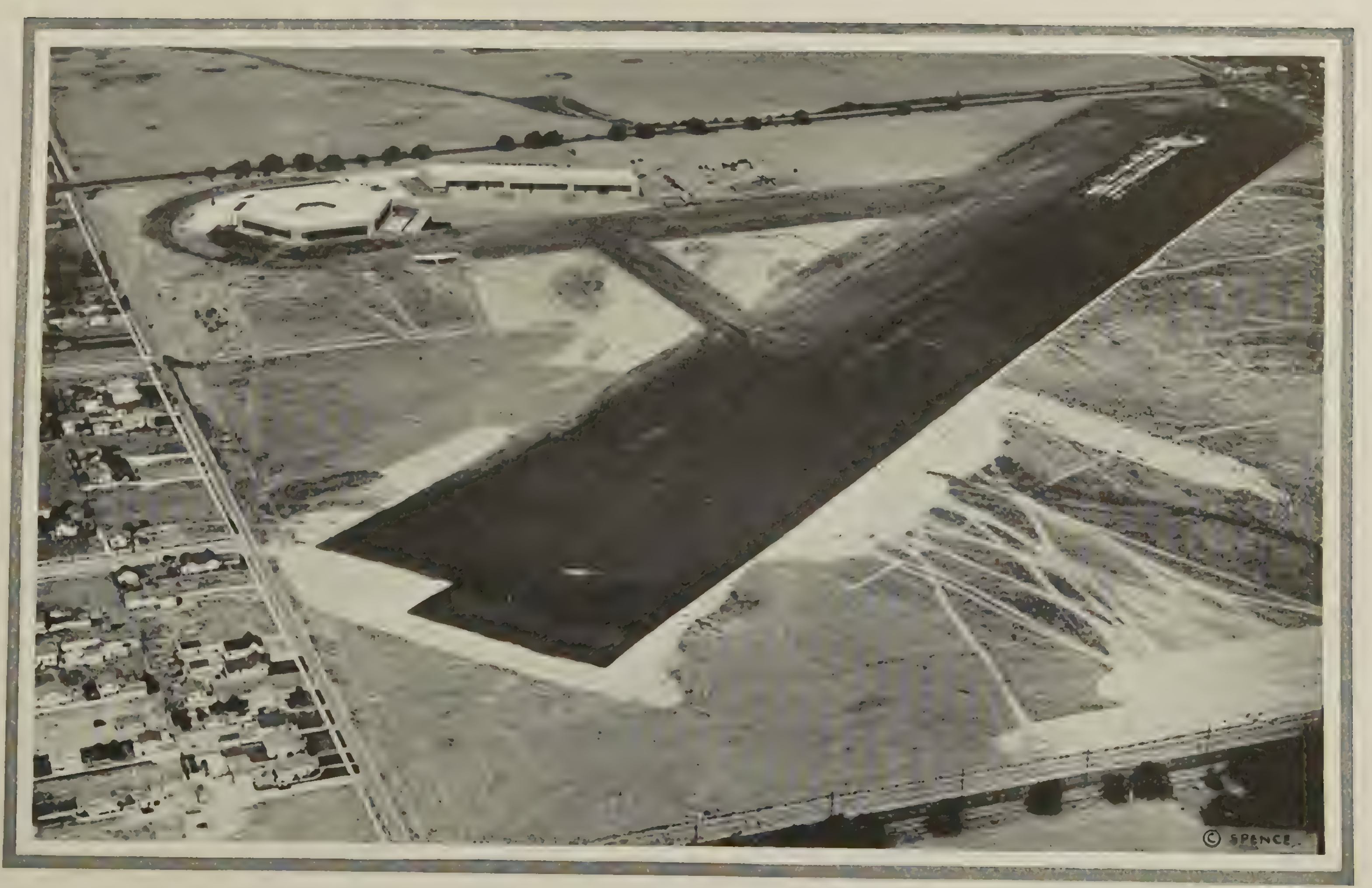
Gabriel Valley lies between the County's center of population and the two great mountain passes to the East, and will be the pathway of an ever increasing transcontinental air traffic. It was desired to develop a Regional Plan of Airports, coordinating, not only with one another, but with the highway network of the County. In view of the fact that the Commission did not have a personnel technically trained or

GRAND CENTRAL AIR TERMINAL, GLENDALE

experienced in the matter of determining what might be the best aviation features of airport selection, and further that the expense would make it impossible for the Commission to employ sufficient skilled personnel, there was formed in 1928 a committee composed of experienced flyers from the various air transport companies, the War Department, the Navy Department and the Department of Commerce, as well as civilian flyers.



PROPOSED AIRPORT SITE No. 8



WESTERN AIR EXPRESS TERMINAL, NEAR ALHAMBRA

AIRPORT PLAN FOR SECTION 2-E

This committee, in cooperation with the Regional Planning Commission, periodically went into the field and reviewed all open flat spaces in the Valley. These spaces were given a rating, based on the physical features involved and the requirements for a system of airports and landing fields. A group of fields was selected to provide for the ultimate development of aircraft in the San Gabriel Valley. The Map Insert, opposite page 86, shows the plan as finally arrived at by the Commission, working in cooperation with this committee. It also shows the location of existing airports and landing fields in the San Gabriel Valley. The object has been to suggest for each community the location of a sufficiently large airport for local use, and to indicate one centrally located major air terminus sufficiently large and well equipped to serve as a focus for all the flying activities of the Valley. This field (designated on the map and on the aerial photograph as No. 8) will serve the needs of heavy transport ships, mail planes and long distance passenger planes. The other airports proposed are so spaced as to provide for the various local lines, private ships and service planes, and also to serve as emergency landing fields. Together they constitute a co-ordinated system of "airways," which would, if set aside now, provide adequate ground facilities for aviation in the years to come. Municipalities, desiring to prepare themselves for the inevitable development of aviation, should secure the necessary land immediately, using it for agricultural purposes, playgrounds or parks until needed for the operation of aircraft.

ULTIMATE AIRPLANE DENSITY

City	Area (Square Miles)	Ultimate Population*	No. of Airplanes*
Alhambra	6.20	100,000	1000
Arcadia	9.70	150,000	1500
Azusa	4.06	74,000	740
Claremont	3.33	25,000	250
Covina	0.86	13,800	138
El Monte	1.14	18,200	182
Glendora	2.18	35,000	350
Monrovia	7.91	80,000	800
Monterey Park	5.00	70,000	700
Pasadena	17.7	300,000	3000
Pomona	12.50	200,000	2000
San Marino	3.50	35,000	350
San Gabriel	3.00	48,000	480
Sierra Madre	2.94	47,000	470
South Pasadena	3.14	50,000	500
West Covina	8.0	128,000	1280
La Verne	1.25	18,000	180
		Total	13,920

* Based on Present City Areas

................SUPERVISORIAL DISTRICT
..........................19............

TO THE HONORABLE BOARD OF SUPERVISORS
OF LOS ANGELES COUNTY

We the undersigned owners of property, do hereby petition your Honorable Body to do the following work under the provisions of the.............................. and to include such structures, appliances, appurtenances and other work as may be deemed necessary by the County Surveyor and County Road Commissioner for the purpose of constructing the above improvement. The proposed limits of the improvement to be made and the boundaries of the district to be assessed therefor are indicated on the attached map which is made a part of this petition.

THE COUNTY OF LOS ANGELES DOES NOT CIRCULATE PETITIONS FOR PUBLIC IMPROVEMENTS

This petition was prepared at the request of:

....
....
....

The following figures have been compiled at the direction of the Board of Supervisors for the information of those concerned, to show the amounts for which this proposed district is bonded, and the current tax rates—also the cost of proposed improvements, if any. *These figures are approximate averages only.*

1. ESTIMATED TOTAL COST OF THIS IMPROVEMENT:

	Annual Payment (Interest not incl.)	Annual Maintenance
Average Cost per Front Foot (Frontage Zone)		
Average Cost Per Acre (Secondary Zone)		
Average Cost Per $100 Assessed Land Value (Frontage Zone)		
Average Cost Per $100 Assessed Land Value (Secondary Zone)		

2. RATIO OF TOTAL BONDED INDEBTEDNESS, PRESENT AND PROPOSED, TO TOTAL ASSESSED VALUATION OF LAND AND IMPROVEMENTS: ____________

3. ASSESSED VALUE OF THIS PROPOSED DISTRICT:
Improvements______________ Land______________ Total______________

4. EXISTING ASSESSMENT DISTRICTS THROUGH WHICH THIS PROPOSED DISTRICT EXTENDS:

District	Bonded Indebtedness	Current Tax Rate Per $100 Assessed Value, Based on—		
		Land	Land and Impvts.	Land Impvts. and Personal
TOTAL				

5. ESTIMATED COST TO THIS DISTRICT OF OTHER PROPOSED IMPROVEMENTS______________

This petition was approved by the Board of Supervisors.................19.... and will be considered when signed by the owners of 51 per cent of the property in the proposed assessment district.

L. E. LAMPTON, County Clerk
By..........................Deputy.

FINANCING HIGHWAY CONSTRUCTION

The problem of financing new highway construction, here as elsewhere, is not only one of where enough money is to be found with which to do all that is reasonably necessary, but it is also a problem of how to direct funds and resources available at a given time into the particular works that will be productive of the greatest general public welfare. Special assessments, County road district taxes and money from the State gasoline tax are the principal sources from which the expense of highway construction is met. The proper allocation of these funds to particular projects is impossible unless all interested parties are brought together in frequent conference, so that action may be based upon a concerted plan and a practical program. When this is done, excessive tax burdens and overlapping assessments will be avoided, and the immense sums spent annually for highway construction will be productive of satisfactory results. The first step however is the development of a comprehensive highway plan, understood and approved by all concerned. The second is the determination, through a careful study of population trends and traffic flow, of a *program of highway construction:* that is, the selection of groups of projects to be completed successively during each of a series of time-periods. A reasonable period for such calculations is five years.

HOW PROJECTS ARE INITIATED

It is the policy in the County of Los Angeles that the initial step in any project included in the Regional Plan shall be taken by the property owners themselves. This takes the form of a petition, signed by a majority of the owners of land within the district proposed to be assessed. Only petitions on official forms, issued by the County upon proper application, are recognized. The value of this process as a means of disseminating necessary information as to justifiable and timely projects, and as a check upon injudicious ones, is evident at once from an inspection of this form, part of which is reproduced on the opposite page. The financial plan for the proposed work is outlined completely thereon, as compiled at the direction of the Board of Supervisors for the information of property owners concerned. The figures given include the estimated cost of the project, current tax rates of the district and its assessed valuation, a summary of bonded indebtedness, if any, incurred by the district for earlier projects, and the estimated cost of other proposed improvements. Thus the prospective signer is acquainted with all facts as to costs and financing. In addition there is attached to each such petition a letter addressed to the Board of Supervisors, bearing the signatures of the Chief Deputy County Surveyor, Alfred Jones, the Chief Engineer of the Regional Planning Commission, Wm. J. Fox, the Construction Engineer of the Road Department, E. A. Burt, and Deputy County Counsel W. B. McKesson, which contains the following paragraph:

> "This petition has been examined and approved as to the physical plan, type of improvement, extent of the assessment district, and legal procedure, by the Regional Planning Commission, the County Road Commissioner, the County Surveyor, and the County Counsel."

These four men are the representatives of their departments on the Interdepartmental Petitions Committee, which meets regularly in the office of the Commission for this purpose. This procedure has been markedly successful, resulting in the abandonment of many untimely projects at an early stage, and building up confidence in the County's methods of procedure. In this simple way, through the presentation of plain facts in a plain manner, expenditures for highway construction have been regulated almost automatically by the taxpayers themselves. Thus, as will be seen by comparing the Map Insert opposite with the one following page 136, considerable progress has already been made in the development of an adequate system of highways.

III. CARRYING OUT THE PLAN

THREE MAJOR STEPS

It has been pointed out that there are three major steps in city planning, as in any kind of planning; the *creation* of the plan, its *acceptance*, and its *accomplishment*. For the San Gabriel Valley, the first step has now been taken. The Highway Plan has been made with great care and after thorough study, as indicated in the body of this report. Refinements in detail will of course have to be made, and new factors will require changes as time goes on, but the basic work is completed. The Map Insert opposite page 16 shows the Plan as finally approved by the Regional Planning Commission.

ACCEPTANCE OF THE PLAN

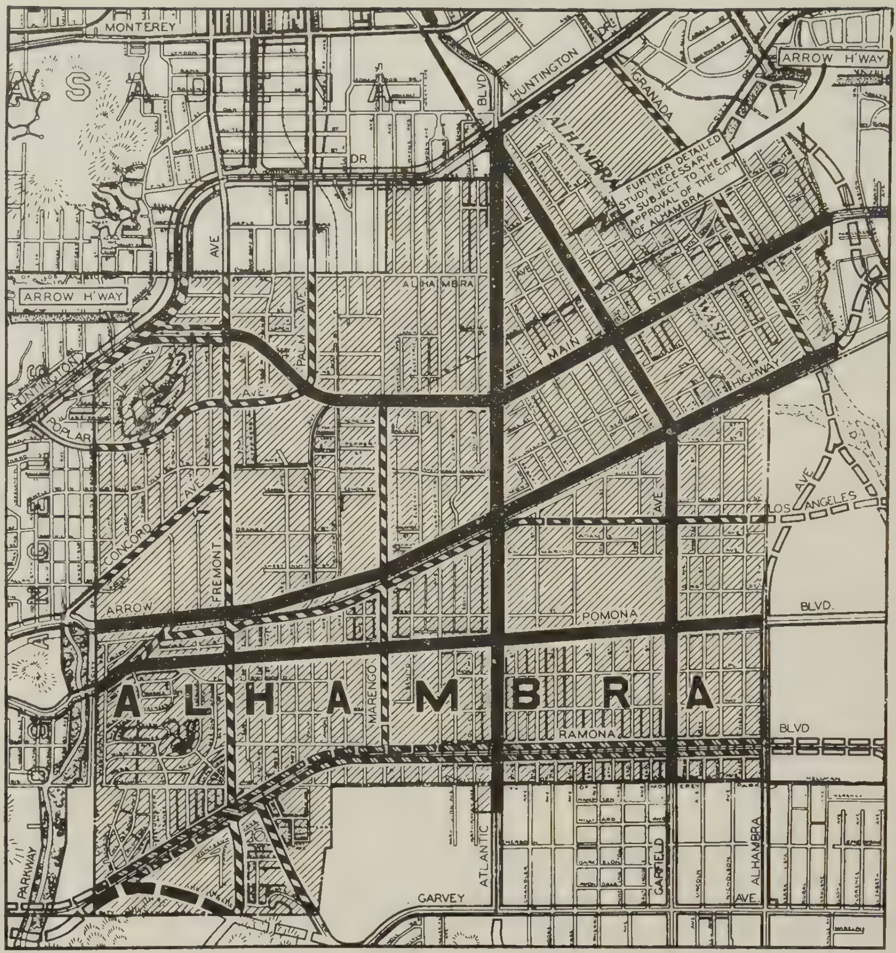
The next step, one of the greatest importance, was to secure the acceptance of the plan by all concerned. In this the Commission has found that almost the only obstacle to be overcome in securing approval and official recognition of the Plan was an imperfect understanding of its significance and intent. Whenever the proper presentation has been made, and the necessary explanation of its general character given, enthusiastic support has been the rule. When the Regional Planning Commission began its work in 1923, the highway system of the San Gabriel Valley, in the absence of any coordinated plan, was disjointed and indirect. Even the most important thoroughfares were exceedingly irregular in alignment and in width. There was little or no contact between the engineering departments of adjacent cities, even where the continuous alignment of a single highway was concerned, and the indirect routes necessarily followed by motorists in traversing the Valley were a source of general public dissatisfaction. The Map Insert illustrates the system as it existed in 1925, with the routes then officially designated by the Automobile Club of Southern California as "main traveled roads" shown in red. Even the State highways had many sharp turns and jogs.

EARLY STEPS TOWARD ACCOMPLISHMENT OF THE PLAN

Immediately upon organization, without waiting until a complete and officially approved plan could be drawn up and adopted, the Commission directed its earliest efforts, here, as throughout the County, to the production of some sort of order out of this chaos. Upon the completion of the base maps, showing all existing public streets and roads in this district, the first rough outline of a systematized network of highways was worked out. Numerous field trips were made; every corner of the Valley was studied in detail, and the tentative layout was then carefully revised. When it appeared to take definite shape, there began a long series of conferences and special studies covering the diverse, yet closely related matters which have been briefly treated on the preceding pages. Every interested party was consulted, all sources of information were drawn upon, and the Plan gradually approached the final form in which it is now presented. Many conferences were called with reference to specific projects sponsored by local improvement associations, with the result that these were frequently modified so as to be in accord with the Plan. Money available in the County road fund was directed to projects where it would do the most good. Important stretches of highway were joined by the opening up of short connecting links. Citizens and organizations interested in civic improvements were informed as to the Plan, and thus provided with definite objectives, and the merits of the short, direct route from place to place began to take hold of the public imagination. In contrast to the situation shown on the map last referred to, attention is called to the Map Insert opposite page 136, upon which are shown highway projects which have been dedicated to full right-of-way width as planned, and those which are now under proceedings for the acquisition of such a right-of-way. In all of these proceedings, paving of the highway is included. The difference between the results obtained by the haphazard method of highway development customary before 1925, and those secured by following a general plan, is evident. This is an exceptionally clear illustration of the advantages of applying to public affairs the every day principles of foresight and economy that usually govern private business. It is better to plan ahead of immediate needs than to wait until traffic congestion becomes acute. Experience has shown that the direct savings affected by planning are great, even if no account be taken of the elimination of delays, accidents and other economic losses.

RESOLUTIONS OF APPROVAL BY CITIES

Most important among the advisers through whose aid the way was cleared for official acceptance of the Plan were the City Engineers and the City Planning Commissions of the incorporated cities in the Valley. These were for the most part quick to see the mutual advantage involved in agreement with one another and with the County, as to plans for the development of through highways. The foundation of inter-community action so successfully laid in handling flood control and sanitation problems, made an excellent basis for the extension of the idea to highways, parks and other matters affecting the region as a whole. The selection of regional routes is bound to modify local plans. Enthusiastic efforts expended in one city to widen and improve a portion of a great thoroughfare were seen to be of full value only when a unified plan gave assurance that the next city east or west, and the intervening unincorporated territory, would continue the road at the same capacity, and on the proper alignment. Where City Plans existed, these were of course taken fully into account, and became as far as practicable, integral parts of the Plan for the Valley as a whole. It was necessary to the success of the Plan, that official approval be made a matter of record. To this end, the Commission prepared a series of city maps, one for each city in the San Gabriel Valley. These are uniform in delineation, and each shows the details of the San Gabriel Valley Highway Plan in so far as it affects the particular city concerned. After each had been studied and approved by the City Engineer and other city officials, it was presented for formal approval to the City Council or Board of Trustees. Attention is called to the wording of the resolutions, in which it is pointed out specifically that approval does not signify the adoption of any program of immediate construction. All that is intended is to secure substantial agreement as to the location and alignment of the necessary through lines of heavy vehicular traffic, so that whatever construction is undertaken in any locality may be intelligently coordinated with work being done elsewhere in the Valley. Opposite the maps are given brief historical sketches and some statistical information concerning each of the cities.



ALHAMBRA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 N 3000 4000 5000 OCTOBER 1928

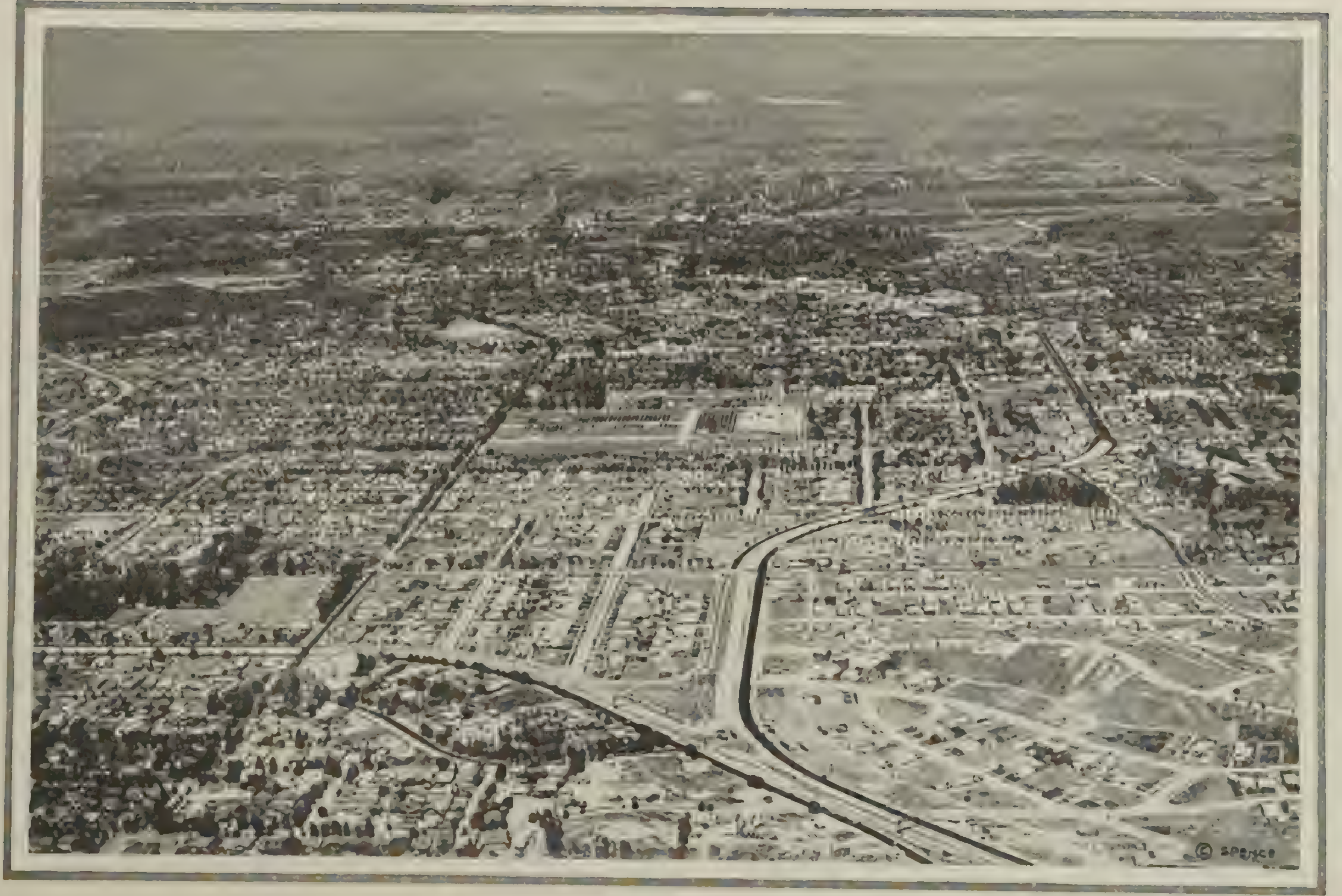
LEGEND

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET EXCEPTING MAIN STREET WHICH WILL REMAIN ITS PRESENT WIDTH OF 90 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET.
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- ▨ PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD RIGHTS OF WAY TO BE 71 FEET WIDE
- ▨ STREETS ADJACENT TO RAILROAD RIGHTS OF WAY TO BE 60 FEET WIDE

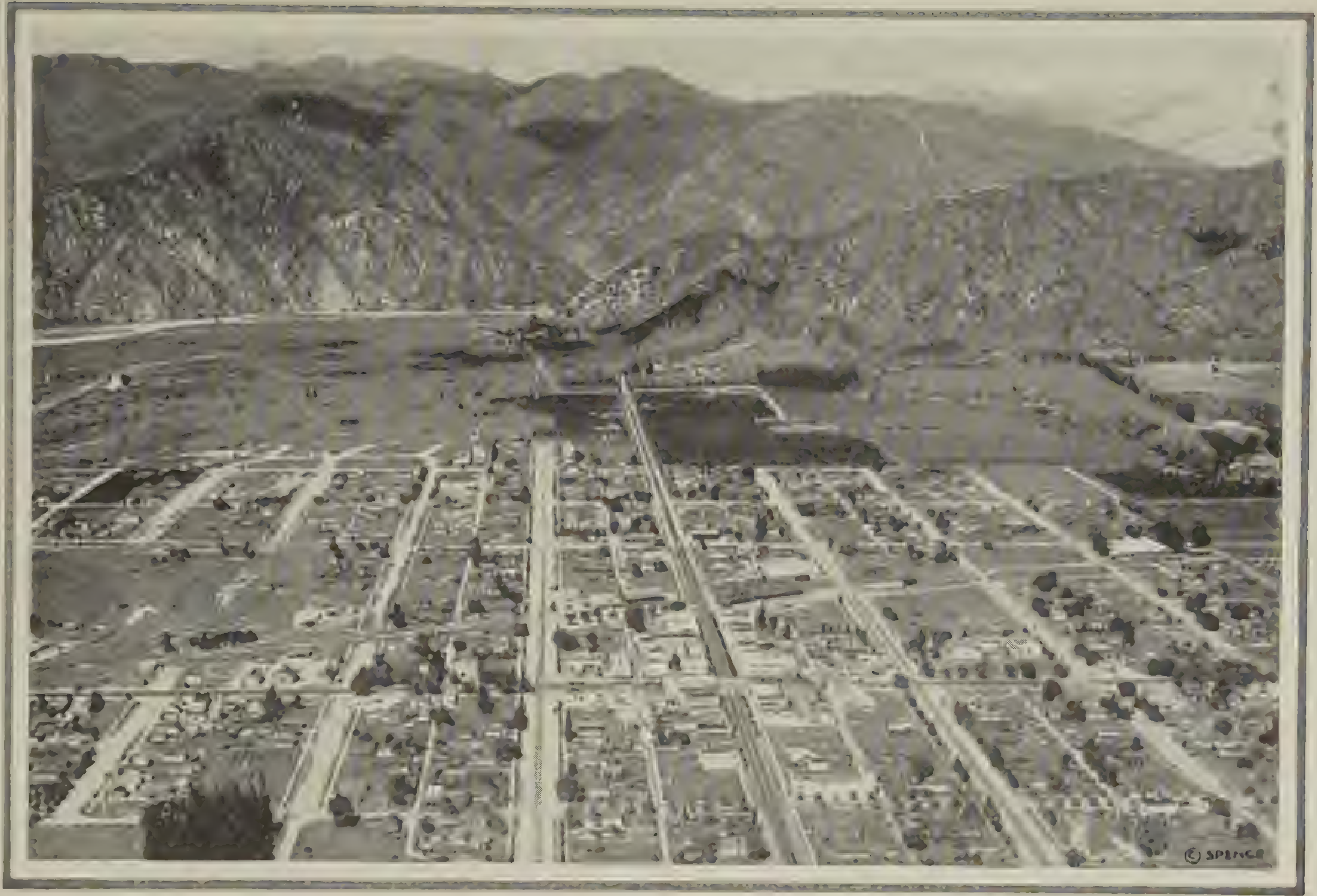
CITY OF ALHAMBRA

Adjoining the easterly portion of the City of Los Angeles, Alhambra was originally platted by B. D. Wilson and J. DeBarth Shorb, on a small portion of the once very extensive lands of the nearby Mission San Gabriel. It is excellently connected with Los Angeles by two of the main interurban lines of the Pacific Electric Railway system. Huntington Drive and Valley Boulevard, two of the best developed traffic arteries from the eastern portion of the county into Los Angeles, make commuting by automobile both direct and easy. In addition, these same highways, with the great north and south routes, Garfield Avenue and Atlantic Boulevard, give quick access to other cities, to the recreational areas in the mountains to the north and east, and to the south beaches. Trains on the main line of the Southern Pacific Railroad from the east make regular stops at Alhambra. The Western Air Express terminal, being developed at the easterly city boundary, which will be one of the most modern airports on the Pacific Coast, now adds another transcontinental service by this newest mode of transportation. Primarily a residential community, Alhambra offers many advantages to those whose work is in Los Angeles. But the low hills to the southwest, which may be seen in the airplane photo on page 100, and the Arroyo Seco tend to keep Alhambra a city distinct from the metropolis in spite of its nearness. One result of this tendency has been the steady growth of the business district, which has kept pace with an increase in population of over 27,000 in nine years. While Alhambra is still a city of homes, industrial development is growing rapidly in a well-defined district. The municipality owns its water system, and has a plentiful supply of excellent drinking water. Chartered in 1915, Alhambra has successfully used the commission form of government with a city manager. An active city planning commission, of which the city engineer is an ex-officio member, is planning the future development of the city.

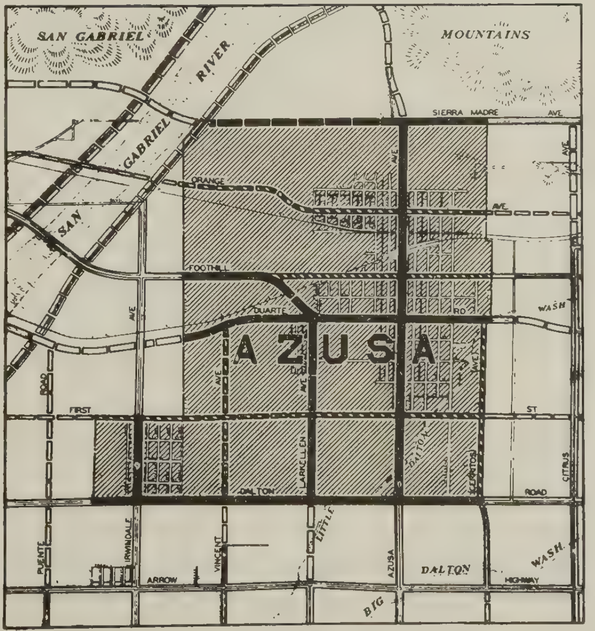
Area in Square Miles	6.2	Incorporated	1903
Population.	35,000	Class	Chartered
Assessed Valuation,	$28,000,000.00	Elevation	446 ft.



ALHAMBRA



AZUSA



AZUSA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000 OCTOBER 1928

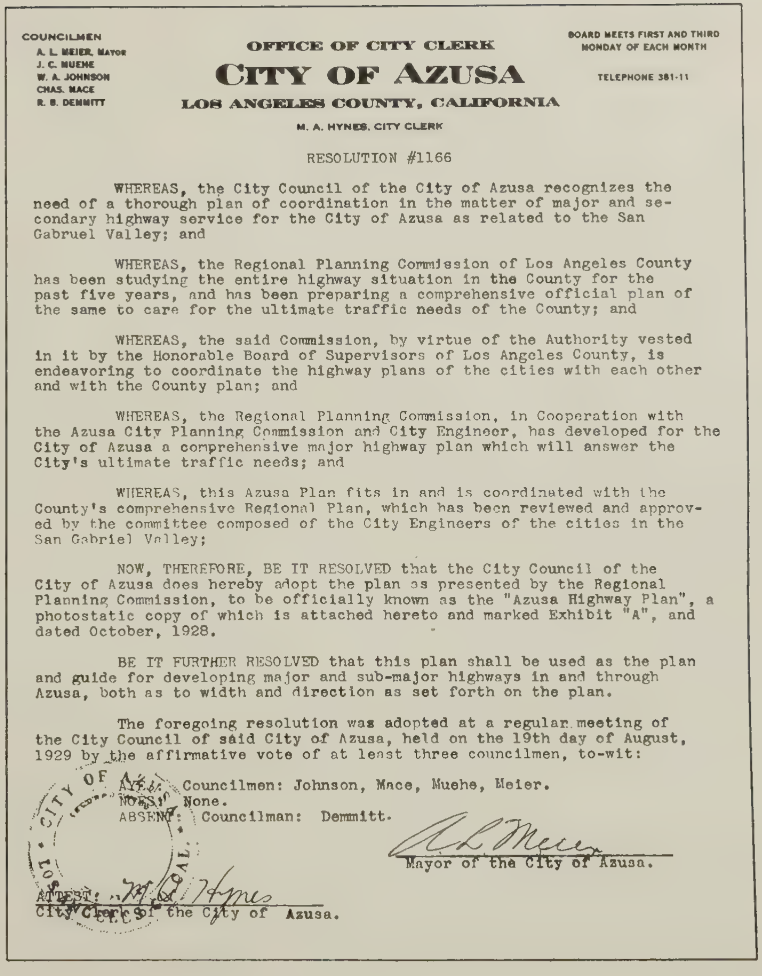
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY .... CITY ENGINEER
NOVEMBER 20, 1929

Exhibit "A"
As per Resolution #1166
of the City of Azusa
Aug 19, 1929



COUNCILMEN
A. L. MEIER, MAYOR
J. C. MUEHE
W. A. JOHNSON
CHAS. MACE
R. B. DEMMITT

OFFICE OF CITY CLERK
CITY OF AZUSA
LOS ANGELES COUNTY, CALIFORNIA
M. A. HYNES, CITY CLERK

BOARD MEETS FIRST AND THIRD MONDAY OF EACH MONTH

TELEPHONE 381-11

RESOLUTION #1166

WHEREAS, the City Council of the City of Azusa recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Azusa as related to the San Gabruel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the Authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County plan; and

WHEREAS, the Regional Planning Commission, in Cooperation with the Azusa City Planning Commission and City Engineer, has developed for the City of Azusa a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Azusa Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by the committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Azusa does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Azusa Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Azusa, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Azusa, held on the 19th day of August, 1929 by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen: Johnson, Mace, Muehe, Meier.
NOES: None.
ABSENT: Councilman: Demmitt.

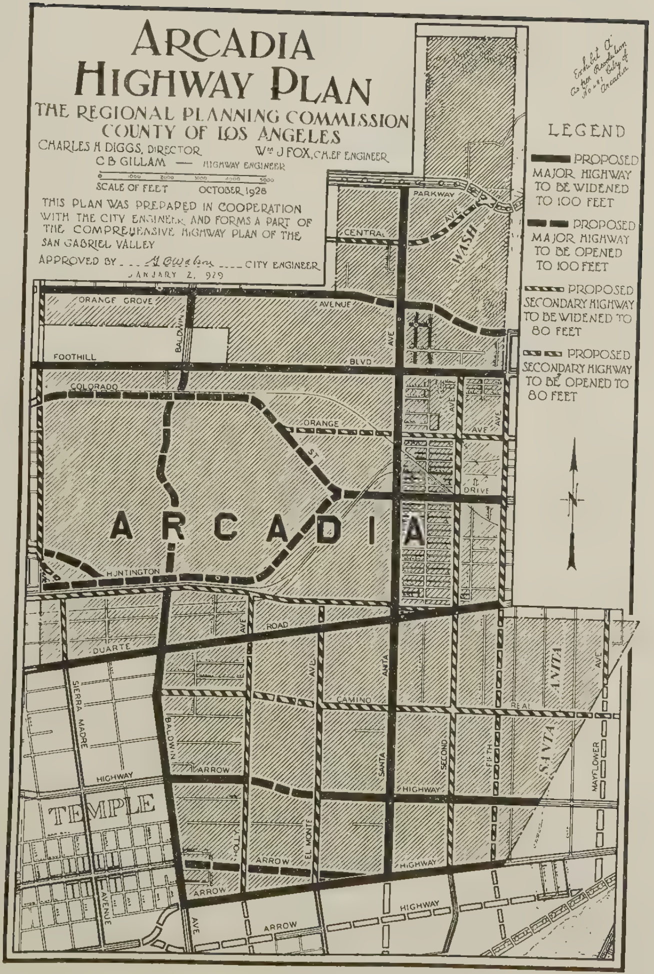
A L Meier
Mayor of the City of Azusa.

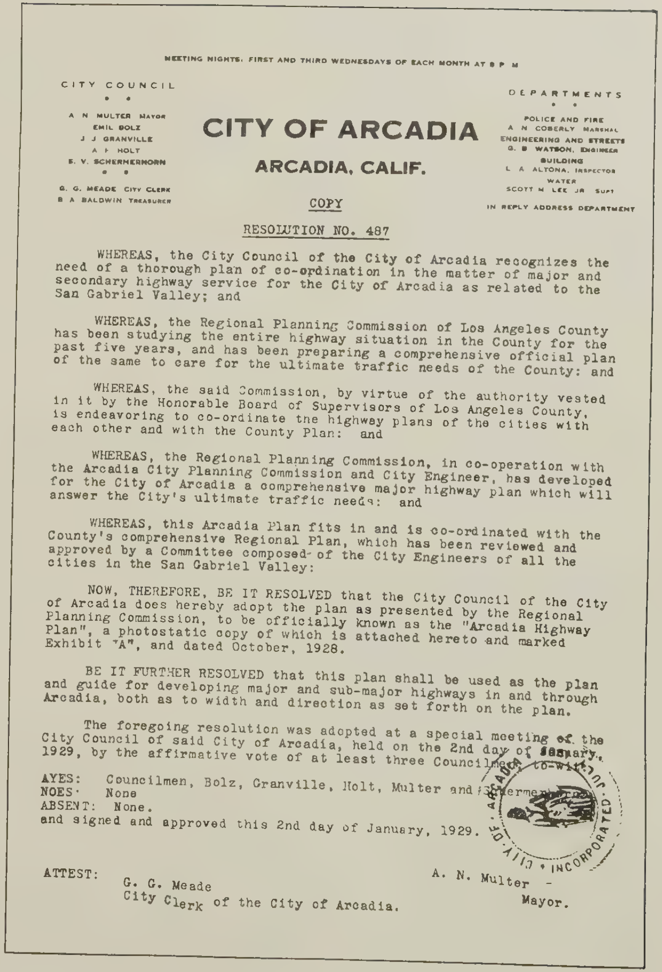
ATTEST: M A Hynes
City Clerk of the City of Azusa.

CITY OF AZUSA

Located at the mouth of the San Gabriel Canyon, about twenty-four miles from Los Angeles, the City of Azusa had its beginning, as did a number of other towns in this section, in the year 1887. Its name, derived from an Indian lodge in the region, was, in its original form, "Asuksagna." Azusa is the gateway to the San Gabriel Canyon, whence comes most of the water used for irrigation in the upper San Gabriel Valley. The photograph on page 101 shows the location of the city with respect to the canyon. Contemplated developments of flood control and water supply within the canyon have focused considerable attention upon Azusa recently. Enormous scenic and recreational areas in the canyon, as yet hardly known, will soon be available to the public. A second County Recreation Camp, similar to the one at Big Pines, is now being developed in the north fork of the San Gabriel River in the Crystal Lake Pine Flats region. The comparative nearness of this very beautiful reservation to the metropolitan area should eventually make Azusa the supply center for a summer population in the mountains equivalent to another city. The wide bed of the San Gabriel River bounding Azusa on the west has deposited extensive gravel beds here, which supply much of the road building material used throughout the county. To the east and south lies some of the most productive citrus land in Los Angeles County, much of the soil being particularly fine for lemons. This has been and probably will continue to be one of the chief sources of Azusa's prosperity. Located on the Glendora line of the Pacific Electric Railway, Azusa is tied closely enough to Los Angeles to be considered a part of the urban development of the region, although it is hardly a suburb in the ordinary sense. Foothill Boulevard, one of the principal highways leading into Los Angeles County from the east, gives Azusa automobile connection with other centers of population in the county. Azusa is governed by a mayor and city council, and its physical development is being watched over by a planning commission of five members. The Civic Center, recently completed through their efforts, is indeed a credit to the community.

Area in Square Miles	4.06	Incorporated	1898
Population	7,000	Class	Sixth
Assessed Valuation,	$2,579,000.00	Elevation	611 ft.


ARCADIA
HIGHWAY PLAN
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H DIGGS, DIRECTOR
Wm J FOX, CHIEF ENGINEER
C B GILLAM — HIGHWAY ENGINEER
0 1000 2000 3000 4000 5000
SCALE OF FEET
OCTOBER 1928
THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF THE SAN GABRIEL VALLEY
APPROVED BY G B Watson CITY ENGINEER
JANUARY 2, 1929
Exhibit A to Resolution No 487 City of Arcadia
LEGEND
PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
N
ARCADIA
TEMPLE
ORANGE GROVE
AVENUE
FOOTHILL
BLVD
COLORADO
ORANGE
ST
DRIVE
HUNTINGTON
DUARTE
ROAD
CAMINO
REAL
ARROW
HIGHWAY
SIERRA MADRE
BALDWIN
AVE
SANTA
ANITA
SECOND
FIFTH
MAYFLOWER
EL MONTE
HOLLY
CENTRAL
PARKWAY
WASH
AVENUE


MEETING NIGHTS, FIRST AND THIRD WEDNESDAYS OF EACH MONTH AT 8 P M

CITY COUNCIL
A N MULTER Mayor
EMIL BOLZ
J J GRANVILLE
A F HOLT
E. V. SCHERMERHORN
G. G. MEADE City Clerk
B A BALDWIN Treasurer

CITY OF ARCADIA
ARCADIA, CALIF.

DEPARTMENTS
POLICE AND FIRE
A N COBERLY Marshal
ENGINEERING AND STREETS
G. B WATSON, Engineer
BUILDING
L A ALTONA, Inspector
WATER
SCOTT M LEE JR Supt
IN REPLY ADDRESS DEPARTMENT

COPY

RESOLUTION NO. 487

WHEREAS, the City Council of the City of Arcadia recognizes the need of a thorough plan of co-ordination in the matter of major and secondary highway service for the City of Arcadia as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County: and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to co-ordinate the highway plans of the cities with each other and with the County Plan: and

WHEREAS, the Regional Planning Commission, in co-operation with the Arcadia City Planning Commission and City Engineer, has developed for the City of Arcadia a comprehensive major highway plan which will answer the City's ultimate traffic needs: and

WHEREAS, this Arcadia Plan fits in and is co-ordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a Committee composed of the City Engineers of all the cities in the San Gabriel Valley:

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Arcadia does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Arcadia Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Arcadia, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a special meeting of the City Council of said City of Arcadia, held on the 2nd day of January, 1929, by the affirmative vote of at least three Councilmen, to-wit:

AYES: Councilmen, Bolz, Granville, Holt, Multer and Schermerhorn
NOES: None
ABSENT: None.
and signed and approved this 2nd day of January, 1929.

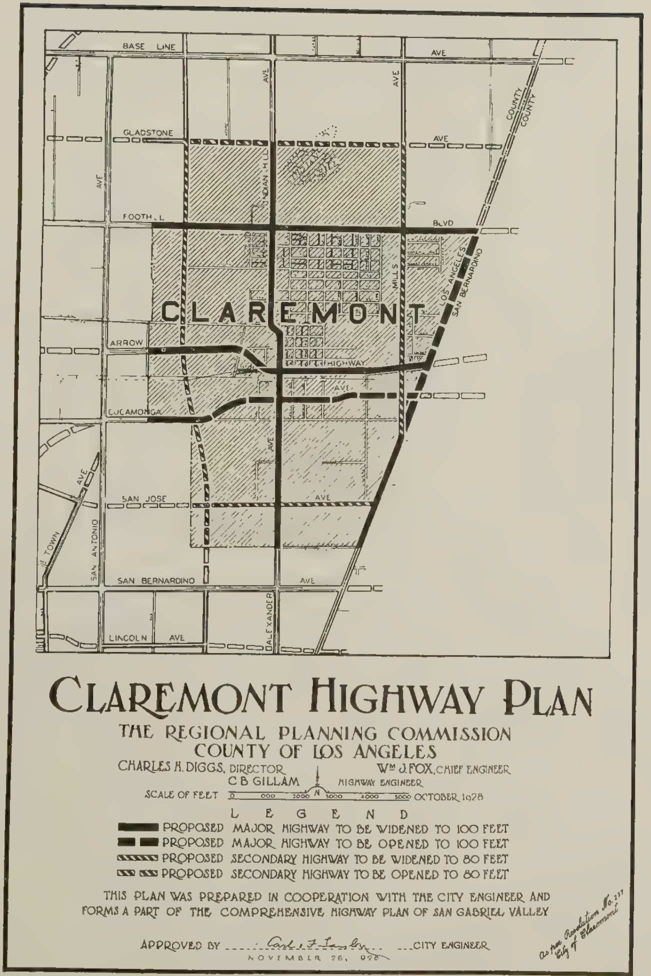
ATTEST:
G. G. Meade
City Clerk of the City of Arcadia.

A. N. Multer -
Mayor.

CITY OF ARCADIA

Situated at the foot of the Sierra Madre mountains of the San Gabriel Range, Arcadia was founded by the late E. J. "Lucky" Baldwin, and constituted 8,000 acres of his estate, the Santa Anita Rancho. Until the beginning of the 20th century, his ranch gave employment to hundreds of workmen. The Baldwin racing stables contained some of the best blooded stock of Southern California. In the days when his great race track was operating, "Lucky" Baldwin planted a double row of pepper trees and bordered these on either side with a row of eucalyptus trees, under which the stable boys warmed up his trotters. Today, these trees have reached their full stature, and furnish ample shade for Santa Anita Avenue, more commonly known as "Double Drive." This avenue has become one of the county's most popular pleasure drives, and adds much to the beauty of the city. Desirous of keeping Arcadia an attractive residential city, the officials and citizens have authorized the planting of many more eucalyptus, acacia, pepper and palm trees along the portions not already planted, of their 60 miles of paved streets. Recently, Huntington Drive, as part of the Regional Plan of Highways, has been widened to 100 feet, with sidewalks, ornamental lights and 70 feet of pavement. Arcadia, incorporated in 1903, is now a prosperous little city in the rich San Gabriel Valley citrus belt. Within its corporate limits is the Government Balloon School, established during the war. The Baldwin Race Track site has been retained as part of this training school, and to this day, portions of the track and grandstand remain. The mayor, councilmen and planning commissioners of this sixth-class city are very active, and have cooperated thoroughly with the County in matters of a regional nature. They realized the need of regulating the use of property, and Arcadia was one of the first cities in the San Gabriel Valley to adopt a zoning ordinance. While principally a residential community, it has an ample area zoned for industrial use, adjacent to excellent transportation facilities. The large undeveloped area within the city limits of Arcadia offers further opportunity to secure the benefits of planned growth.

Area in Square Miles	11.50	Incorporated	1903
Population	6,800	Class	Sixth
Assessed Valuation,	$8,500,000.00	Elevation	490 ft.



CLAREMONT HIGHWAY PLAN
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C B GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 000 2000 3000 4000 5000 OCTOBER 1928

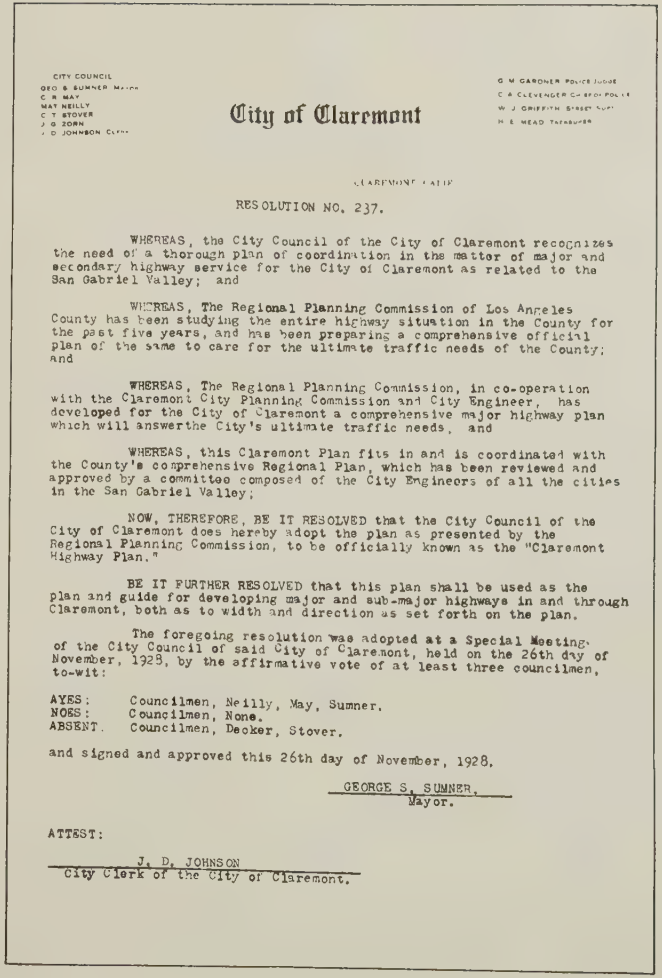
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Carl F. ...CITY ENGINEER
NOVEMBER 26, 1928

As per Resolution No. 237
City of Claremont


CITY COUNCIL
GEO S SUMNER Mayor
C R MAY
MAT NEILLY
C T STOVER
J G ZORN
J D JOHNSON Clerk

City of Claremont

G M GARDNER Police Judge
C A CLEVENGER Chief of Police
W J GRIFFITH Street Supt
H E MEAD Treasurer

CLAREMONT CALIF

RESOLUTION NO. 237.

WHEREAS, the City Council of the City of Claremont recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Claremont as related to the San Gabriel Valley; and

WHEREAS, The Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, The Regional Planning Commission, in co-operation with the Claremont City Planning Commission and City Engineer, has developed for the City of Claremont a comprehensive major highway plan which will answerthe City's ultimate traffic needs, and

WHEREAS, this Claremont Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of all the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Claremont does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Claremont Highway Plan."

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Claremont, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a Special Meeting of the City Council of said City of Claremont, held on the 26th day of November, 1928, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen, Neilly, May, Sumner.
NOES: Councilmen, None.
ABSENT. Councilmen, Decker, Stover.

and signed and approved this 26th day of November, 1928.

GEORGE S. SUMNER,
Mayor.

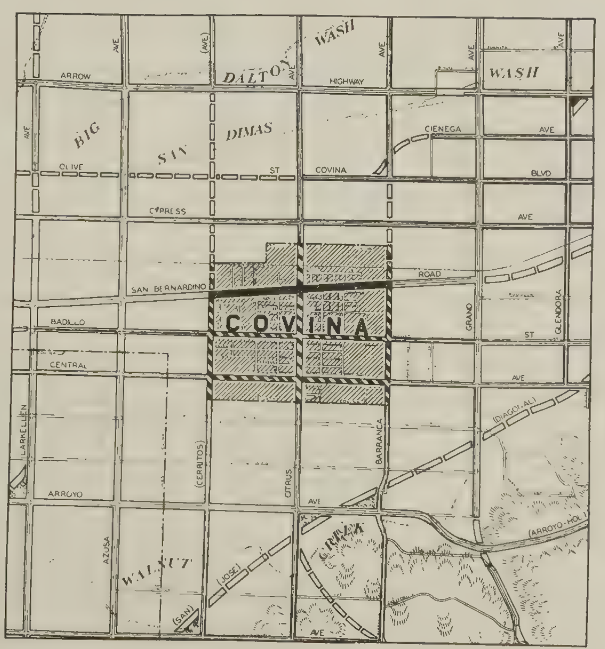
ATTEST:

J. D. JOHNSON
City Clerk of the City of Claremont.

CITY OF CLAREMONT

Lying in the shadow of Old Baldy on the eastern boundary of the county, Claremont, with its colleges, is surrounded by vast orange groves. Pomona College was opened at Pomona in 1888 by the Congregational Church organization. The next year, the gift of a tract of land and one building brought about its "temporary" removal to Claremont, where it has remained ever since. The campus of this co-educational non-sectarian institution now comprises 150 acres, of which 60 acres of naturally wooded land are in Blanchard Park. A comprehensive plan for the development of the campus includes the quadrangle of academic buildings and the Greek Theatre in the park. This theatre seats over 4,000 persons, and is the scene of many campus functions. The college museums and libraries have several collections of importance. The graduate schools are known as Claremont Colleges. Adjoining the Pomona College campus on the north is Scripps College for women, opened in 1927. This campus is being developed in California architecture on a spacious yet intimate plan. The growth of Claremont has has been due principally to the growth of the colleges, although its location in the heart of the orange belt has contributed much to its prosperity. The first citrus association in the state was formed here, four packing plants now handling 750,000 boxes of oranges and lemons a year. Industry is represented by two attractive manufacturing plants whose products have a world-wide distribution. Between Foothill Boulevard and Valley Boulevard, Claremont is easily accessible by automobile from all directions. The Pacific Electric Railway gives direct interurban service to Los Angeles and San Bernardino, a branch line running to Pomona four miles to the south. The city is on the main line of the Santa Fe Railway, while the Pacific Electric provides connection with the main lines of the Southern Pacific and Union Pacific Railroads at La Verne and Pomona. The community is fortunate in having as its present mayor, Dr. George S. Sumner, Controller of the Claremont Colleges. Thus the interests of the town and the colleges are joined, and the municipal government is brought into close touch with the carefully planned growth of the colleges. The excellent spirit of cooperation that exists between the cities of the eastern end of the Valley was evidenced recently when Claremont joined with Pomona and La Verne in a Sanitation District for the joint solution of some common problems.

Area in Square Miles	3.33	Incorporated	1907
Population	3,500	Class	Sixth
Assessed Valuation,	$3,087,000.00	Elevation	1141 ft.



COVINA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H DIGGS, DIRECTOR Wm J FOX, CHIEF ENGINEER
C B GILLAM HIGHWAY ENGINEER
SCALE OF FEET OCTOBER 1928

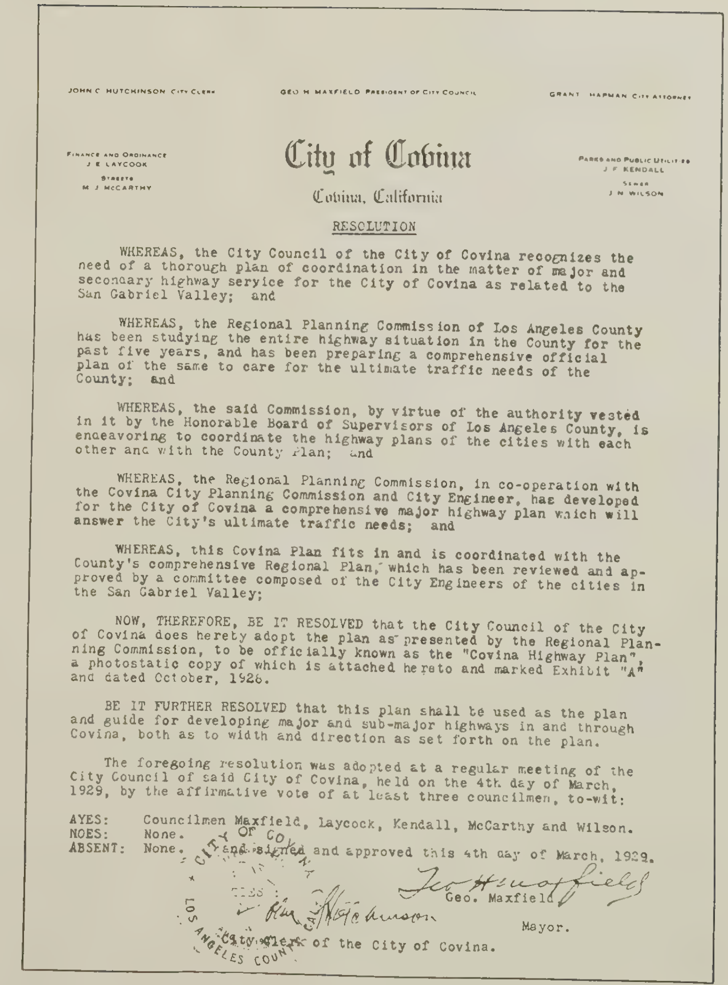
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY .... CITY ENGINEER

As per Resolution adopted by the City Council of Covina March 4th 1929



JOHN C HUTCHINSON City Clerk
GEO H MAXFIELD President of City Council
GRANT HAPMAN City Attorney

Finance and Ordinance
J E LAYCOOK
Streets
M J McCARTHY

Parks and Public Utilities
J F KENDALL
Sewer
J N WILSON

City of Covina

Covina, California

RESOLUTION

WHEREAS, the City Council of the City of Covina recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Covina as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Covina City Planning Commission and City Engineer, has developed for the City of Covina a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Covina Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Covina does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Covina Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A" and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Covina, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Covina, held on the 4th day of March, 1929, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Maxfield, Laycock, Kendall, McCarthy and Wilson.
NOES: None.
ABSENT: None.

Passed and signed and approved this 4th day of March, 1929.

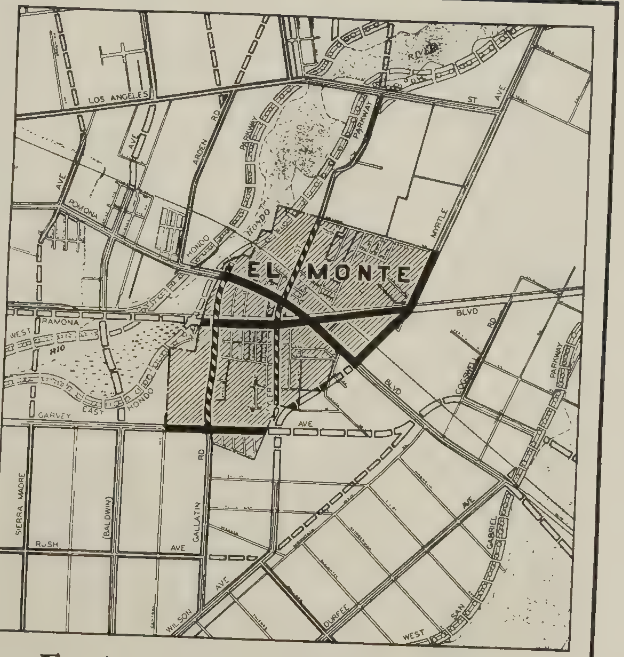
Geo H Maxfield
Geo. Maxfield
Mayor.

City Clerk of the City of Covina.

CITY OF COVINA

The agricultural development following the partition of the huge Rancho La Puente was the cause of the establishment of several agricultural towns, among which is the incorporated city of Covina. Since the subdivision of the Rancho into small holdings, the land west of Covina around the San Jose Hills to Puente has been devoted largely to walnuts. The great orange belt that extends from Azusa and Glendora to Claremont, adjoins Covina on the east. Located in the heart of such great and productive groves, Covina could scarcely have avoided growth and prosperity. The present business center is so situated as to leave the residential portion of the city comparatively secure from future encroachment as the business area may expand. The one city park is the setting for an open air plunge which attracts many swimmers from other communities in the Valley. In contrast to the condition in several nearby towns, a large proportion of the city's area of less than a square mile is already subdivided and improved. There is still some land within the corporate limits yet to be developed, but with any pronounced increase in population, the city must overflow into the surrounding country. Fortunately, as the territory about Covina is thus far unspoiled by isolated and unrelated units of subdivided area, those responsible for the guidance of the future extension of the city will be able to avoid many of the difficulties that confront other communities. The outstanding need at present is for improvement of enough through highways to make Covina accessible in a degree consistent with its location. The effect on this city of the completion of the Arrow Highway and the Arroyo-Holt-Garvey Avenue project (neither of which actually passes through Covina) is difficult to foresee and may conceivably result in marked changes. Badillo Avenue along the Pacific Electric Railway, and San Bernardino Road (Covina Boulevard), although offering problems of construction and financing, are sure to increase through traffic and bring Covina closer to the metropolitan center. The gratifying cooperation between the city council and the city planning commission promises careful consideration of these matters and of the somewhat unusual problems involved in the expansion of the city.

Area in Square Miles . . .	0.86	Incorporated	1901
Population	5,000	Class	Sixth
Assessed Valuation,	$2,213,000.00	Elevation	.554 ft.



EL MONTE HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C.B GILLAM
HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000
OCTOBER 1928

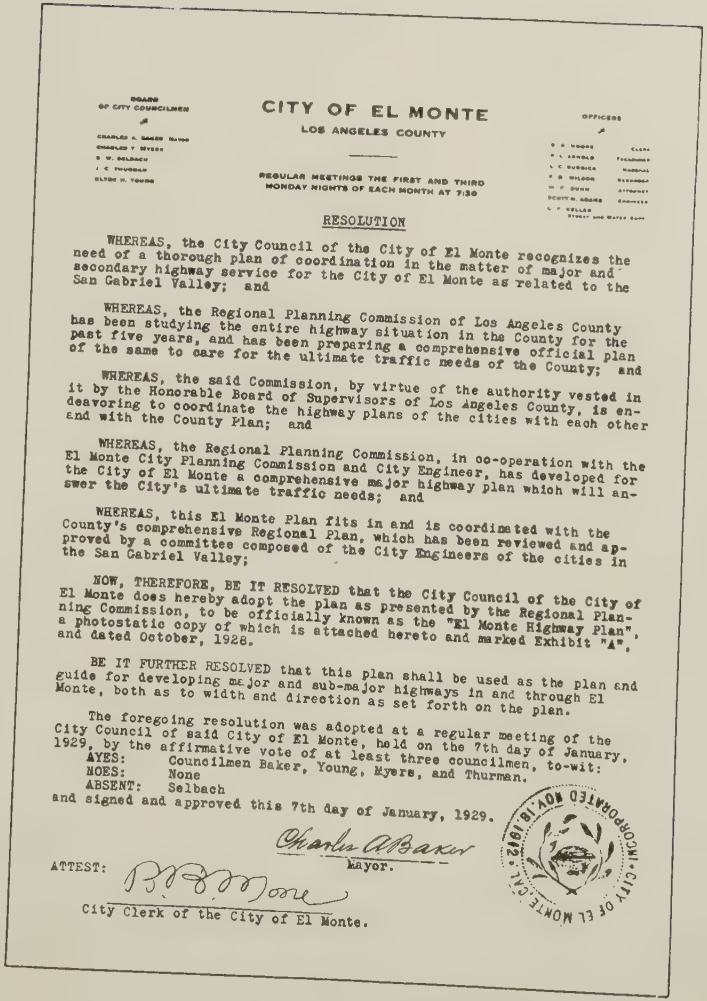
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY J.C. Cox CITY ENGINEER
JANUARY 7, 1929

As per Exhibit "a" Resolution adopted by the City Council of El Monte Jan. 7. 1929



BOARD
OF CITY COUNCILMEN
CHARLES A. BAKER Mayor
CHARLES T. MYERS
B. W. SELBACH
J. C. THURMAN
ELTON H. YOUNG

CITY OF EL MONTE

LOS ANGELES COUNTY

REGULAR MEETINGS THE FIRST AND THIRD
MONDAY NIGHTS OF EACH MONTH AT 7:30

OFFICERS
B. B. MOORE Clerk
Treasurer
Marshal
Recorder
W. F. DUNN Attorney
SCOTT H. ADAMS Engineer
Street and Water Supt.

RESOLUTION

WHEREAS, the City Council of the City of El Monte recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of El Monte as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the El Monte City Planning Commission and City Engineer, has developed for the City of El Monte a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this El Monte Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of El Monte does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "El Monte Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through El Monte, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of El Monte, held on the 7th day of January, 1929, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Baker, Young, Myers, and Thurman.
NOES: None
ABSENT: Selbach

and signed and approved this 7th day of January, 1929.

Charles A Baker
Mayor.

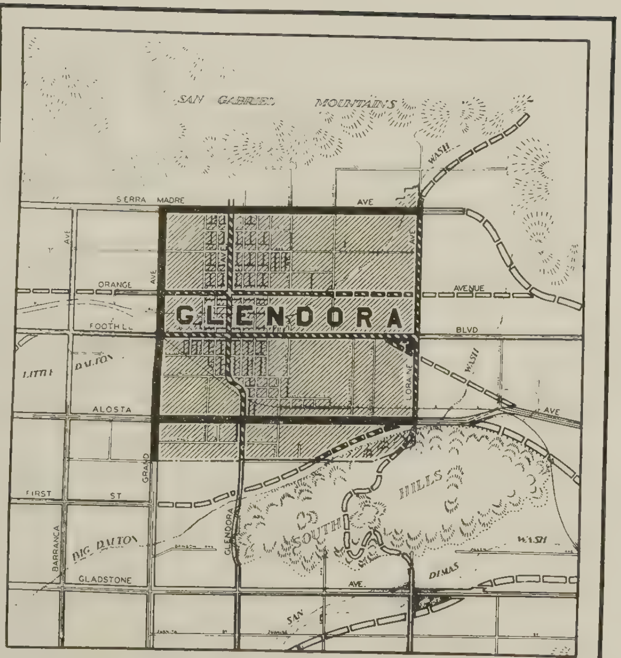
ATTEST: B. B. Moore
City Clerk of the City of El Monte.

INCORPORATED NOV. 18, 1912

CITY OF EL MONTE

At the end of the old Santa Fe Trail, the City of El Monte lies on the island formed by the Rio Hondo and the San Gabriel River, 13 miles east of Los Angeles. El Monte is the center of a walnut growing district. Two packing houses are busy with the marketing of the walnut crop of the district, while hundreds of carloads of vegetables also are shipped annually from here. The production of flower seeds, for which the soil and climatic conditions in certain areas about El Monte are particularly favorable, is an important industry. Dairying, also, is represented by one of the largest certified dairies in the West. At Gay's Lion Farm, one of the most unusual business enterprises in the United States, African lions are raised and trained for motion picture work and for sale to circuses and menageries in all parts of the country. This institution draws many visitors to El Monte year after year. Served by the Southern Pacific Railroad and the Pacific Electric Railway, El Monte is close to employment and market centers. On the edge of the commuting district, it provides homes for numerous workers in Los Angeles. In common with many cities large and small in all parts of the country, El Monte is unfortunate in having been established before there was any effective planning. As a result, the arrangement of its streets and buildings is a handicap to its further development, and tends to counteract the natural advantages of its situation. The municipal government is consequently faced with some very difficult problems, greater in proportion than those faced by most of the cities of the San Gabriel Valley. The development of an effective major street plan is the first step in solving some of these problems, but the arrangement of local streets around the business center demands further study. A long time will be required to remedy the present irregularity, but El Monte has begun. There is an active planning commission, organized in 1926, which has been concerned particularly with opening up by-pass streets and alleys in the business section to relieve the present congested conditions on Pomona Boulevard and to increase the efficiency of the district for business.

Area in Square Miles . . .	1.14	Incorporated	1912
Population	4,500	Class	Sixth
Assessed Valuation,	$2,233,000.00	Elevation	285 ft.



GLENDORA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR   Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000 OCTOBER 1928

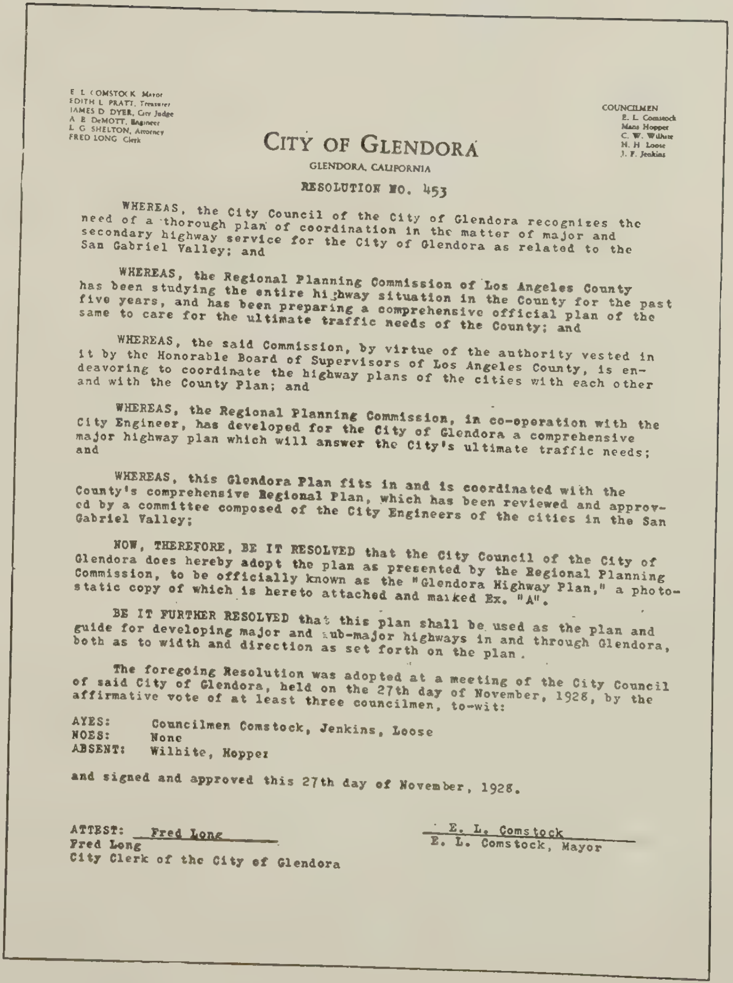
LEGEND

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Arthur E DeMott CITY ENGINEER

Exhibit "A" as per Resolution No. 453. City of Glendora



E. L. COMSTOCK, Mayor
EDITH L. PRATT, Treasurer
JAMES D. DYER, City Judge
A. E. DeMOTT, Engineer
L. G. SHELTON, Attorney
FRED LONG, Clerk

COUNCILMEN
E. L. Comstock
Mans Hopper
C. W. Wilhite
H. H. Loose
J. F. Jenkins

CITY OF GLENDORA

GLENDORA, CALIFORNIA

RESOLUTION NO. 453

WHEREAS, the City Council of the City of Glendora recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Glendora as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the City Engineer, has developed for the City of Glendora a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Glendora Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Glendora does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Glendora Highway Plan," a photostatic copy of which is hereto attached and marked Ex. "A".

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Glendora, both as to width and direction as set forth on the plan.

The foregoing Resolution was adopted at a meeting of the City Council of said City of Glendora, held on the 27th day of November, 1928, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Comstock, Jenkins, Loose
NOES: None
ABSENT: Wilhite, Hopper

and signed and approved this 27th day of November, 1928.

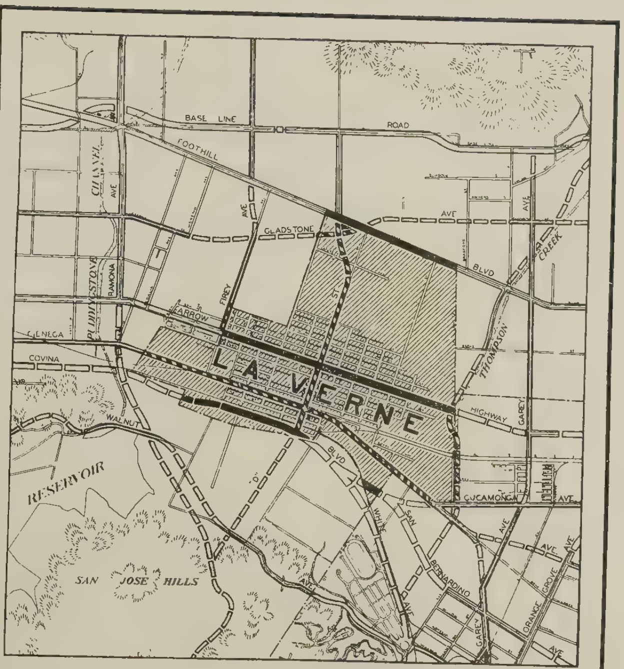
ATTEST: Fred Long
Fred Long
City Clerk of the City of Glendora

E. L. Comstock
E. L. Comstock, Mayor

CITY OF GLENDORA

Known as "The Pride of the Foothills," the little city of Glendora, located on the northern edge of the San Gabriel Valley, 28 miles from Los Angeles, is a splendid example of an interesting type of Southern California city. Only about one-quarter of the area is subdivided and built up. The remainder of the city's area is devoted to some of the finest lemon and orange groves to be found; outside the city these groves extend for miles. Six packing houses market the fruit from these groves, one of them having had rather consistently the largest output in the state. Employment is given to many persons by these plants. Glendora has a beautiful setting at the foot of the mountains, enhanced by the care with which the town has been developed from the early days. Magnificent pepper trees line the streets and continue the garden-like appearance of the orange groves all about. Just back of the city in the low hills is the Glendora Foothills School, a private institution for children under twelve years, and the Girls' Collegiate School with an attendance of more than a hundred. Glendora and Azusa share the Citrus Union High School, midway between the two cities. Foothill Boulevard, the Pacific Electric Railway and the Santa Fe Railway provide the principal connections with Los Angeles. A scenic road, now being built up Little Dalton Canyon from Glendora to the East Fork of San Gabriel Canyon, will soon open up recreational areas as yet little used, of which it has been said that the people of Glendora have a bit of Switzerland at their very door. The town of Alosta, laid out a few years earlier, is now a part of Glendora, which was founded in 1887. Growth since has been steady and normal. The government of the city is vested in a mayor and city council. There is no planning commission, but the city engineer and several interested citizens have been active in planning for Glendora's growth, and in supporting those proposals of the Regional Planning Commission which affect the city. Glendora is a residential community of considerable charm, and the relatively large proportion of its area still undeveloped gives an excellent opportunity to realize by careful planning the full value of its natural assets.

Area in Square Miles . . .	2.18	Incorporated	1911
Population	4,600	Class	Sixth
Assessed Valuation,	$2,099,000.00	Elevation	747 ft.



LA VERNE HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C B GILLAM
HIGHWAY ENGINEER

SCALE OF FEET 0 1000 2000 N 3000 4000 5000 OCTOBER 1928

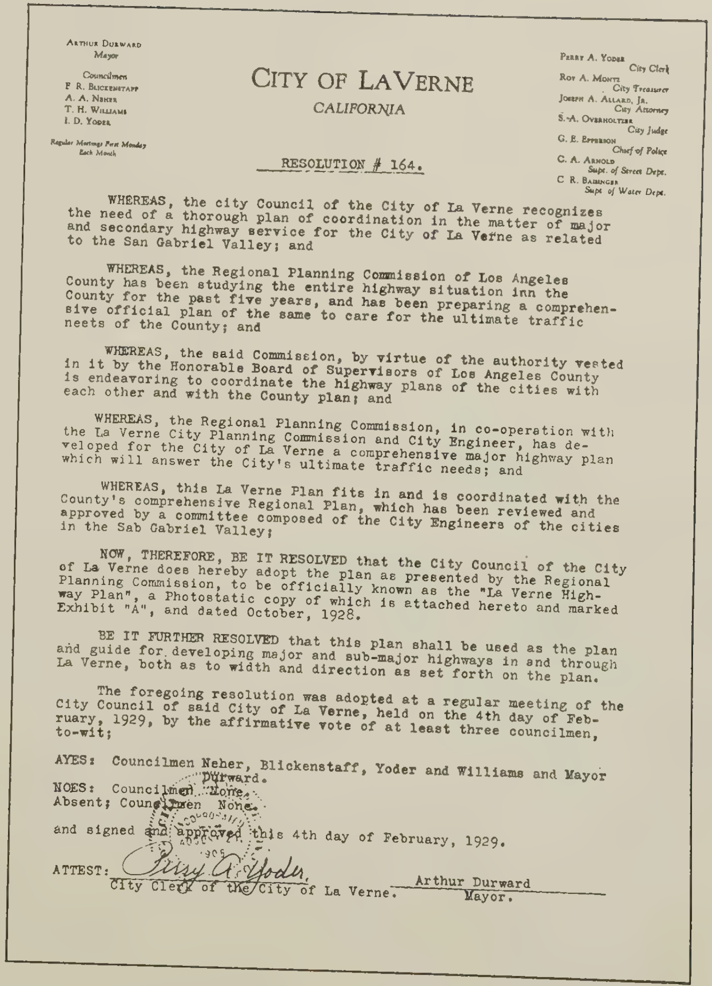
LEGEND

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Alva J. Smith CITY ENGINEER

Exhibit "A"
as per Resolution No. 164
City of La Verne



ARTHUR DURWARD
Mayor

Councilmen
F. R. BLICKENSTAFF
A. A. NEHER
T. H. WILLIAMS
I. D. YODER

Regular Meetings First Monday
Each Month

CITY OF LA VERNE

CALIFORNIA

PERRY A. YODER
City Clerk
ROY A. MONTZ
City Treasurer
JOSEPH A. ALLARD, JR.
City Attorney
S. A. OVERHOLTZER
City Judge
G. E. EPPERSON
Chief of Police
C. A. ARNOLD
Supt. of Street Dept.
C. R. BARINGER
Supt. of Water Dept.

RESOLUTION # 164.

WHEREAS, the city Council of the City of La Verne recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of La Verne as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation inn the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic neets of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County is endeavoring to coordinate the highway plans of the cities with each other and with the County plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the La Verne City Planning Commission and City Engineer, has developed for the City of La Verne a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this La Verne Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the Sab Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of La Verne does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "La Verne Highway Plan", a Photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through La Verne, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of La Verne, held on the 4th day of February, 1929, by the affirmative vote of at least three councilmen, to-wit;

AYES: Councilmen Neher, Blickenstaff, Yoder and Williams and Mayor Durward.
NOES: Councilmen None.
Absent; Councilmen None.

and signed and approved this 4th day of February, 1929.

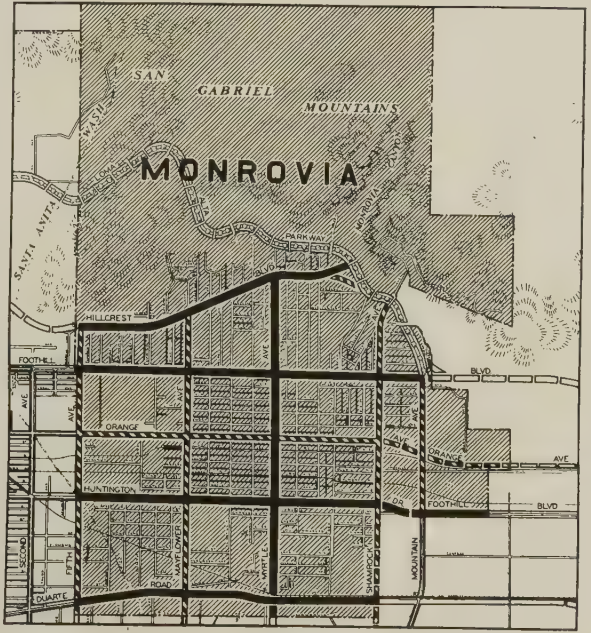
ATTEST: Perry A. Yoder
City Clerk of the City of La Verne.

Arthur Durward
Mayor.

CITY OF LA VERNE

Where the San Jose Hills and the Sierra Madre Mountains pinch the San Gabriel Valley down to its narrowest, 33 miles from Los Angeles, is the city of La Verne. It was originally a Dunkard colony, called Lordsburg. One of the earliest acts of the colonists was to establish a college. Classes first met in a hotel building dating from the days of most rapid growth about 1887. Today La Verne College has a campus of three city blocks with three modern buildings and an attendance of two hundred students. During this period one of California's richest citrus sections has developed about La Verne, where five packing plants have been built. This city, composed almost entirely of single-family homes, has a planning commission recently reorganized under the Planning Act of 1929, which is concerned at present with zoning problems. The arrangement of the Santa Fe, Southern Pacific and Pacific Electric Railroad lines seems to provide an industrial area that will not conflict with residential expansion to the south toward the San Jose Hills. In these hills is the Puddingstone Reservoir offering great possibilities for development as a park with the sanction and encouragement of the County Flood Control District. Such development would add even more to the desirability of residential expansion toward the hills. Here also is located the Mountain Meadows Country Club. The completion of projects under the Regional Plan of Highways should give La Verne considerably increased facilities. The Arrow Highway, many portions of which are already under proceedings, as shown on the Map Insert following page 136, will join Los Angeles and San Bernardino by a direct route. As a result of the efforts of the city to obtain an outlet to the south, a feasible line, which is essentially an extension of "D" Street, has now been surveyed by the county. The accomplishment of the San Jose Diagonal will give La Verne quicker access to the south coast beaches and the Los Angeles Harbor.

Area in Square Miles . . .	1.25	Incorporated	1906
Population	2,850	Class	Sixth
Assessed Valuation,	$1,690,250.00	Elevation	1,039 ft.



MONROVIA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM
HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000
N
OCTOBER 1928

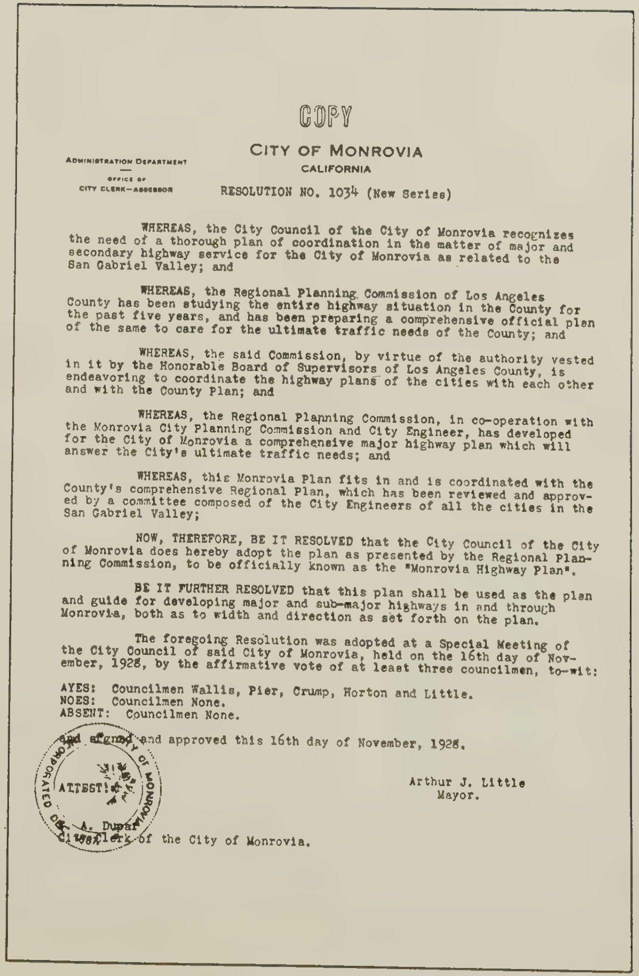
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Henry S. Gierlich CITY ENGINEER
NOVEMBER 8, 1928

As per Resolution No 1034 (New Series) City of Monrovia



COPY

ADMINISTRATION DEPARTMENT
OFFICE OF
CITY CLERK—ASSESSOR

CITY OF MONROVIA
CALIFORNIA

RESOLUTION NO. 1034 (New Series)

WHEREAS, the City Council of the City of Monrovia recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Monrovia as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Monrovia City Planning Commission and City Engineer, has developed for the City of Monrovia a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Monrovia Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of all the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Monrovia does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Monrovia Highway Plan".

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Monrovia, both as to width and direction as set forth on the plan.

The foregoing Resolution was adopted at a Special Meeting of the City Council of said City of Monrovia, held on the 16th day of November, 1928, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Wallis, Pier, Crump, Horton and Little.
NOES: Councilmen None.
ABSENT: Councilmen None.

and signed and approved this 16th day of November, 1928.

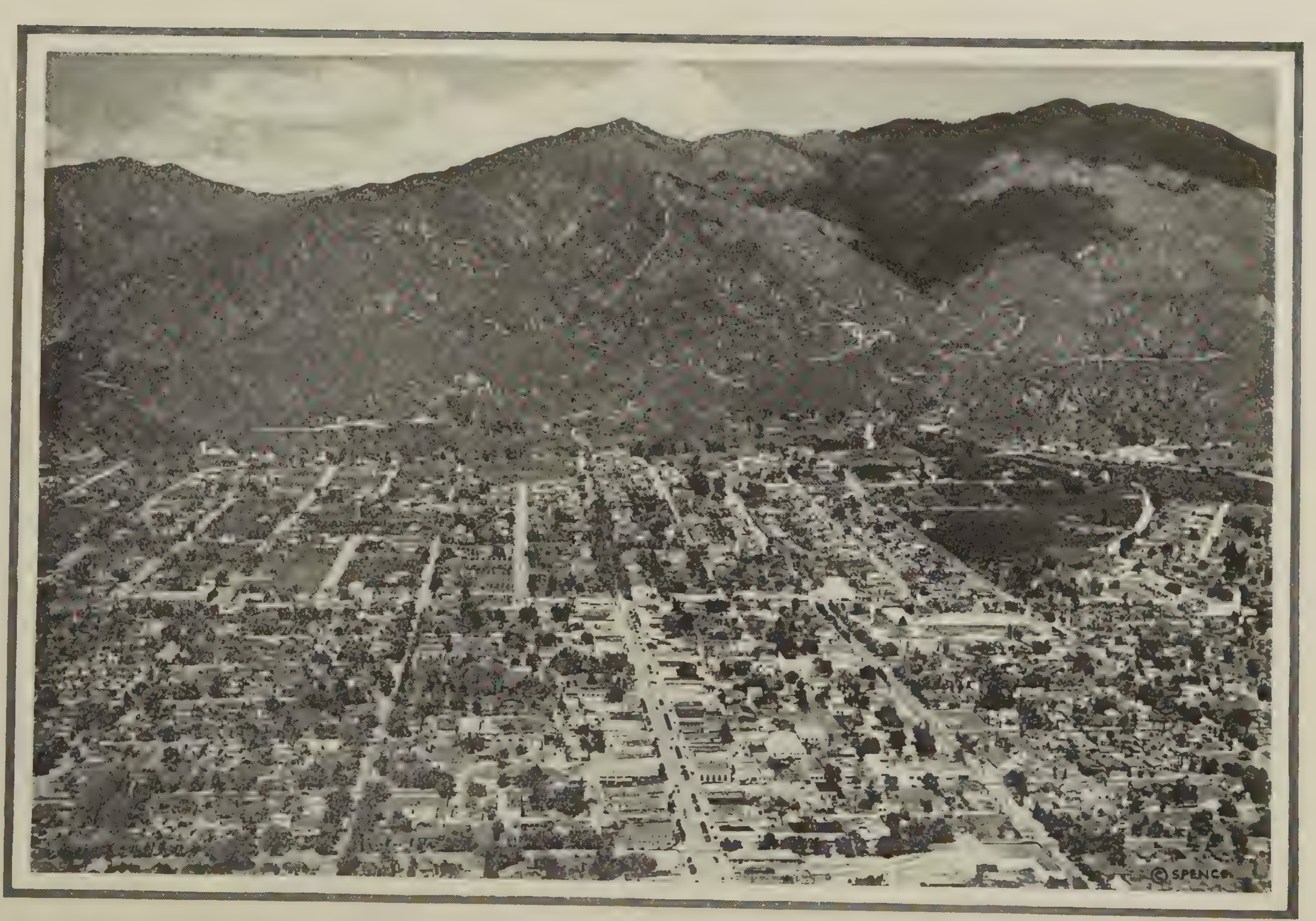
Arthur J. Little
Mayor.

ATTEST:
A. Dupar
City Clerk of the City of Monrovia.

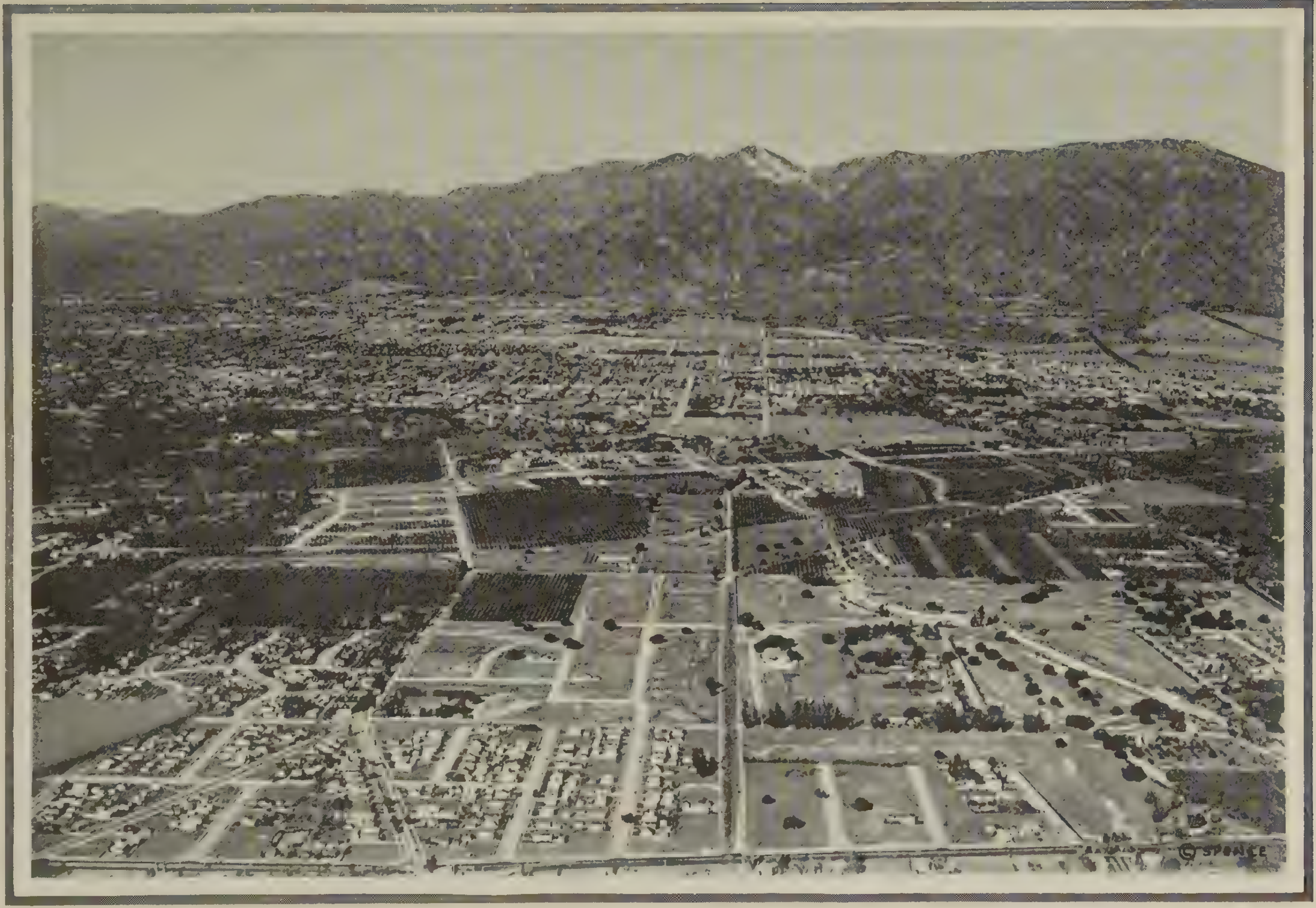
CITY OF MONROVIA

Eighteen miles east of Los Angeles is the City of Monrovia, lying on the gentle slopes at the foot of the Sierra Madre Mountains between Santa Anita Canyon and Sawpit Canyon. In the photograph of the city on page 118, the latter canyon may be clearly seen in the shadow of a cloud. Named for W. N. Monroe, one of the early settlers, the townsite was established on May 17, 1886, and the anniversary of this date is still the occasion for a yearly civic celebration. The strong community feeling indicated by this annual event has found realization in several civic projects. Monrovia citizens are proud to show and to use their three parks. Library Park is a beautiful garden of five acres in the heart of the city. The twenty-two acre Recreation Park in the eastern part of town, with its tennis courts and other playgrounds, a modern swimming pool and the American Legion Building, is becoming more and more attractive as the planting program is being carried out. In Monrovia Canyon, a branch of Sawpit Canyon, is a reservation of 1000 acres of shady ravines and ridges, well provided with tables and other picnic facilities. This mountain park extends up into the canyon to the high Flood Control Dam which not only protects Monrovia from danger of flood, but also conserves the water supply from season to season. From the area about the top of the dam one may see almost the entire San Gabriel Valley in one great sweep. Made accessible from Monrovia by Canyon Drive, this scenic area is also the beginning of numerous trails into interesting territory farther back in the mountains. The educational system includes four Grammar Schools, a Junior High School and a Union High School shared with Arcadia and Duarte. Supplementing the public school system is a parochial school. The fifty-six miles of improved streets, the eight miles of modern street lights, and the sewer system which serves 80 percent of the city's area all testify to the progressive and constructive character of municipal activity. An excellent water system brings clear, cold water from natural mountain springs in addition to what is pumped from several wells. One of the first to be established in the Valley, the City Planning Commission of Monrovia has been continuously active ever since its appointment. As a result of its efforts a comprehensive zoning ordinance was adopted in February, 1923. Within the city limits of Monrovia, Foothill Boulevard and Huntington Drive have recently been paved to their ultimate width, in accordance with the Regional Plan of Highways.

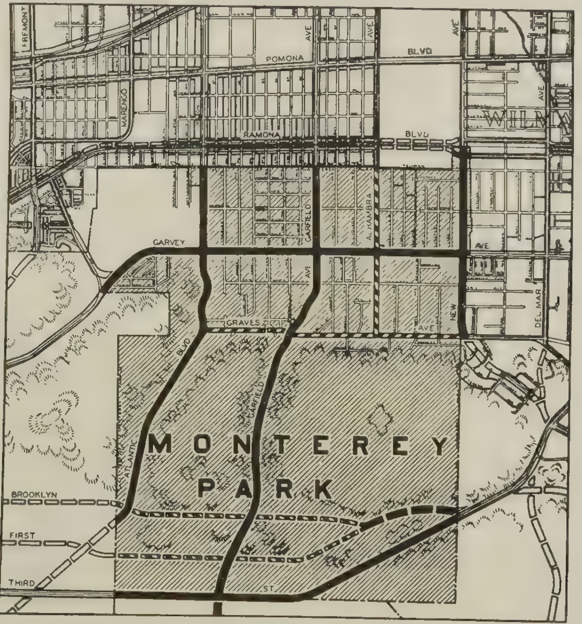
Area in Square Miles	7.91	Incorporated	1887
Population	14,000	Class	Sixth
Assessed Valuation,	$11,265,000.00	Elevation	532 ft.



MONROVIA



SAN MARINO



MONTEREY PARK HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
C.B. GILLAM
Wm J. FOX, CHIEF ENGINEER
HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000 OCTOBER 1928

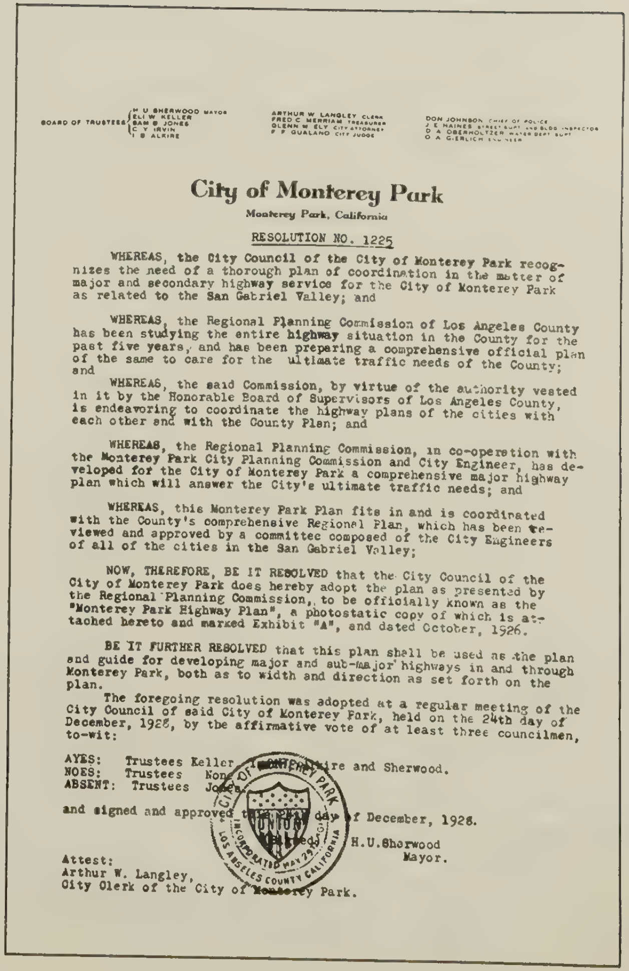
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY O.A. Gierlich ... CITY ENGINEER
DECEMBER 24, 1928

As per Resolution
No. 1225
City of Monterey Park



BOARD OF TRUSTEES
H U SHERWOOD MAYOR
ELI W KELLER
SAM B JONES
C Y IRVIN
I B ALKIRE

ARTHUR W LANGLEY CLERK
FRED C MERRIAM TREASURER
GLENN W ELY CITY ATTORNEY
F F GUALANO CITY JUDGE

DON JOHNSON CHIEF OF POLICE
J E HAINES STREET SUPT AND BLDG INSPECTOR
D A OBERHOLTZER WATER DEPT SUPT
O A GIERLICH ENGINEER

City of Monterey Park

Monterey Park, California

RESOLUTION NO. 1225

WHEREAS, the City Council of the City of Monterey Park recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Monterey Park as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Monterey Park City Planning Commission and City Engineer, has developed for the City of Monterey Park a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Monterey Park Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of all of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Monterey Park does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Monterey Park Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1926.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Monterey Park, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Monterey Park, held on the 24th day of December, 1928, by the affirmative vote of at least three councilmen, to-wit:

AYES: Trustees Keller, I[illegible]ire and Sherwood.
NOES: Trustees None
ABSENT: Trustees Jones.

and signed and approved [illegible] day of December, 1928.

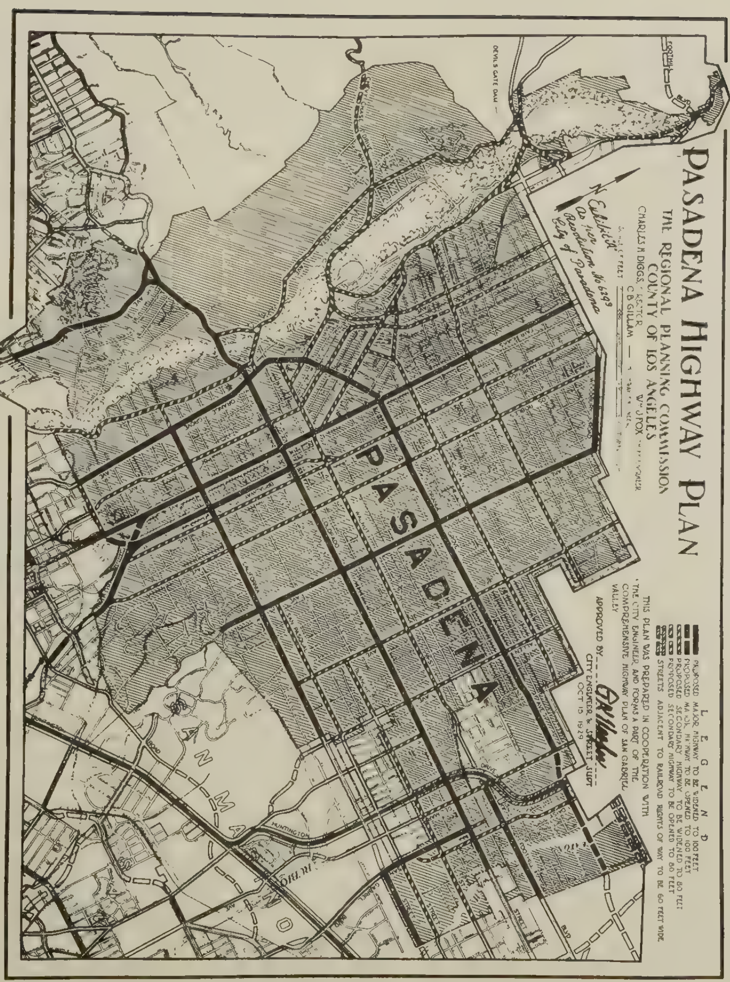
(Signed) H.U.Sherwood
Mayor.

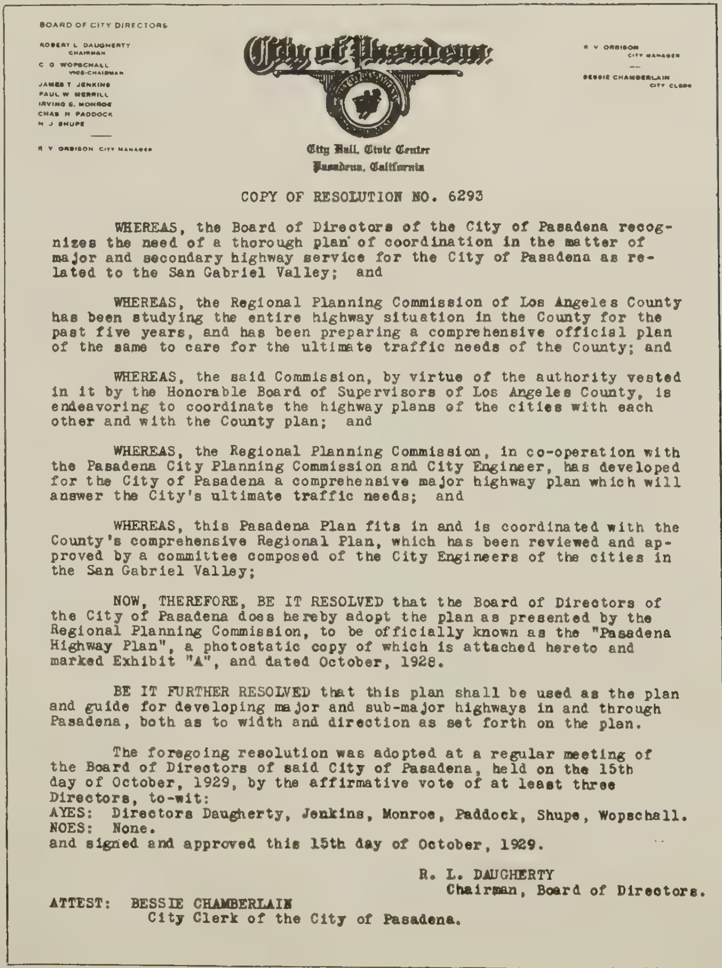
Attest:
Arthur W. Langley,
City Clerk of the City of Monterey Park.

CITY OF MONTEREY PARK

When Allesandro Repetto purchased a 5,000-acre portion of the lands of Mission San Gabriel shortly after the Civil War, there was through one corner of the tract a road to Los Angeles known as the Portesuelo de la Rosa de la Castella, because of the profusion of wild roses covering its hillslopes. Later its name was changed to Monterey Pass Road, and today the southern portion, known as Garvey Avenue, is the principal thoroughfare to Los Angeles from the growing city of Monterey Park. Parts of the Repetto Rancho have been subdivided and built up in the cities of Montebello and Monterey Park, but until just recently the greater part has been held in acreage just as in the early days. Only that portion of Monterey Park north of the San Rafael Hills along Garvey Avenue has been developed up to the present. The gentle slopes of the rolling hills and the picturesque Midwick Country Club should make homesites in Monterey Park appeal to many executives with business in the southeast industrial area. This is especially true now that Monterey Park is so easily reached by both Garfield Boulevard and the newly improved Atlantic Boulevard. That the community is expecting an increase of population due to these conditions is evident in the subdivision activity in the hilly southern portion of the city. The Monterey Park City Planning Commission has been preparing for just such eventualities. The subdivision illustrated on page 51 is a splendid example of what may be accomplished by a far-seeing subdivider cooperating with a planning commission. Definitely a residential community, having no railroads within its city limits, Monterey Park is determined to make the most of its beautiful surroundings by the wise control of difficult conditions that may either make or mar the city. The ultimate extension of Garvey Avenue to connect Pomona and Los Angeles by a short east and west route may have as much effect on Monterey Park as the completion of the north and south arteries mentioned above. The city council is to be commended for its splendid cooperation in preparing for the widening of Garvey Avenue according to the Regional Plan of Highways by setback building lines established several years ago. The effect of this step may be seen in the picture on page 66.

Area in Square Miles	5.0	Incorporated	1916
Population	8,000	Class	Sixth
Assessed Valuation,	$4,436,000.00	Elevation	376 ft.


PASADENA HIGHWAY PLAN
THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H DIGGS, DIRECTOR
C B GILLAM
LEGEND
PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
STREETS ADJACENT TO RAILROAD RIGHTS OF WAY TO BE 60 FEET WIDE
THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY
APPROVED BY
CITY ENGINEER & STREET SUPT
OCT 15 1929
N
Exhibit "A"
As per Resolution No 6293
City of Pasadena
FOOTHILL
DEVILS GATE DAM
PASADENA
SAN MARINO



BOARD OF CITY DIRECTORS

ROBERT L. DAUGHERTY
CHAIRMAN
C. G. WOPSCHALL
VICE-CHAIRMAN
JAMES T. JENKINS
PAUL W. MERRILL
IRVING S. MONROE
CHAS. H. PADDOCK
H. J. SHUPE

R. V. ORBISON CITY MANAGER

City of Pasadena

City Hall, Civic Center
Pasadena, California

R. V. ORBISON
CITY MANAGER

BESSIE CHAMBERLAIN
CITY CLERK

COPY OF RESOLUTION NO. 6293

WHEREAS, the Board of Directors of the City of Pasadena recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Pasadena as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Pasadena City Planning Commission and City Engineer, has developed for the City of Pasadena a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Pasadena Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the City of Pasadena does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Pasadena Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Pasadena, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the Board of Directors of said City of Pasadena, held on the 15th day of October, 1929, by the affirmative vote of at least three Directors, to-wit:
AYES: Directors Daugherty, Jenkins, Monroe, Paddock, Shupe, Wopschall.
NOES: None.
and signed and approved this 15th day of October, 1929.

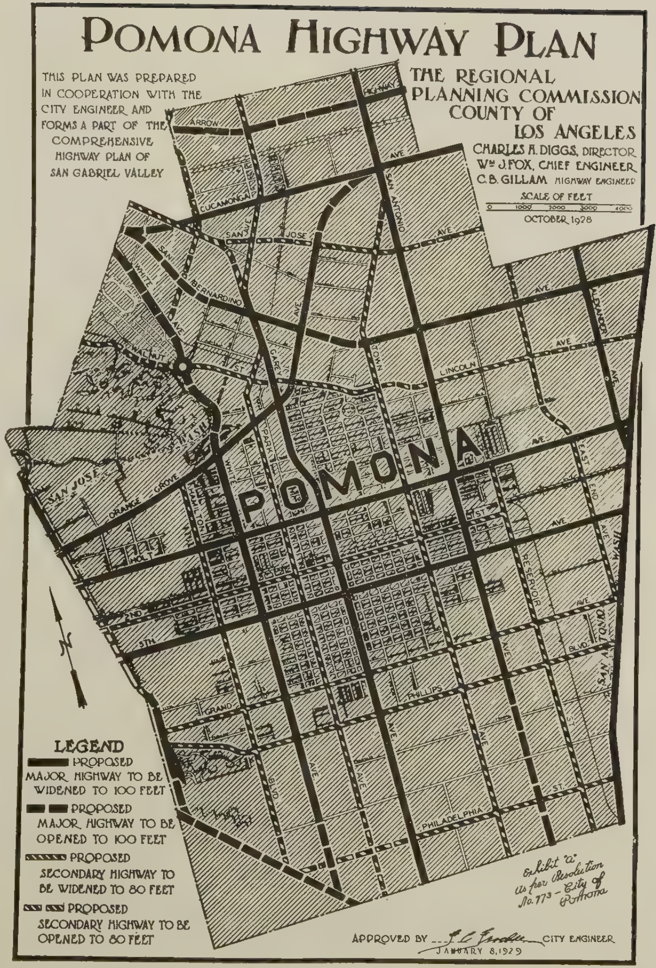
R. L. DAUGHERTY
Chairman, Board of Directors.

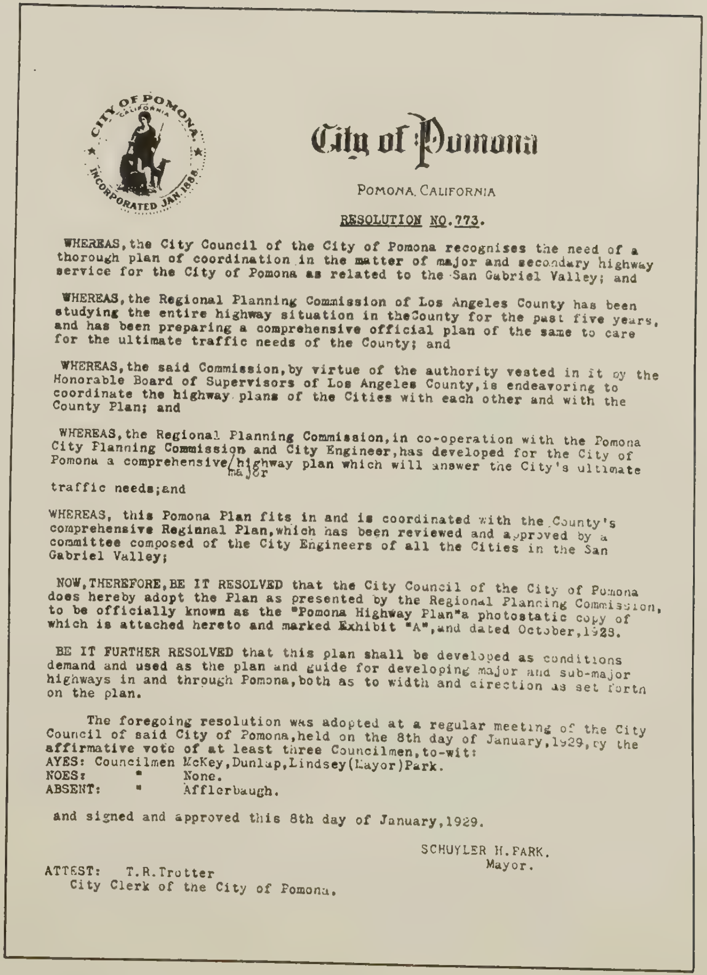
ATTEST: BESSIE CHAMBERLAIN
City Clerk of the City of Pasadena.

CITY OF PASADENA

Adjoining Los Angeles on the northeast, Pasadena is the largest and most populous of the cities in the San Gabriel Valley. Set upon a table-land above the magnificent Arroyo Seco on the west which separates it from Los Angeles, the city has enjoyed a more nearly independent existence than any of the other communities close to the metropolis. It was founded in 1874 by colonists from Indiana. They laid out South Orange Grove Avenue along which they established homes on small ranches planted to orange trees. The village of 391 persons in 1880 was incorporated six years later with a population of 2700. Today it is one of the wealthiest as well as one of the largest cities in the state. Pasadena has long been a favorite winter residence for people of wealth from all parts of the country, and the character of the city has been largely set by these people and their beautifully developed homes. It is the seat of the California Institute of Technology, and was one of the first cities to establish a Junior College in connection with the public school system. The Community Playhouse has won a national reputation for its excellent productions of the best in drama. The banks of the Arroyo Seco in the vicinity of the beautiful Colorado Street Bridge have been developed as a fine residential section. In the upper end of the arroyo, Brookside Park, a large recreation area, has been created. Here the famous Rose Bowl, one of the features of the Annual Tournament of Roses, is located. Plans are now under way to develop Eaton Wash on the opposite side of the city in a similar manner. Thirteen smaller parks bring the total park area to 1005 acres. A number of important highways make Pasadena's well-developed business section and famous hotels easily available. Several lines of the Pacific Electric Railway provide frequent and speedy service to Los Angeles; the same company also operates local trolley lines and bus routes within the city. Pasadena is an important station on the main line of the Santa Fe Railroad from the east. The City Planning Commission has been working for some years and is producing enviable results. The progress on the Civic Center is one of the results of Pasadena planning that has commanded interest in all parts of the country. The very beautiful Library and City Hall are completed while the land for the Auditorium has been secured. A tree planting program is planned for those streets not already lined with trees. Pasadena is governed by a Board of Directors; the administration of the city's business is in the hands of a city manager.

Area in Square Miles . .	17.697	Incorporated	1886
Population	85,000	Class	Chartered
Assessed Valuation,	$185,966,120.00	Elevation	.850 ft.


POMONA HIGHWAY PLAN
THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY
THE REGIONAL PLANNING COMMISSION COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C.B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET
0 1000 2000 3000 4000
OCTOBER 1928
POMONA
ARROW
CUCAMONGA
SAN ANTONIO AVE
SAN BERNARDINO
JOSE
WHITE
LINCOLN
HOLT
ORANGE GROVE
SAN JOSE
PHILLIPS
GRAND
PHILADELPHIA
RESERVOIR
EAST END AVE
SAN ANTONIO
N
LEGEND
PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
Exhibit "A" As per Resolution No. 773 - City of Pomona
APPROVED BY F. C. Finkle CITY ENGINEER
JANUARY 8, 1929



City of Pomona

POMONA, CALIFORNIA

RESOLUTION NO. 773.

WHEREAS, the City Council of the City of Pomona recognises the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Pomona as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in theCounty for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the Cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Pomona City Planning Commission and City Engineer, has developed for the City of Pomona a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Pomona Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of all the Cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Pomona does hereby adopt the Plan as presented by the Regional Planning Commission, to be officially known as the "Pomona Highway Plan" a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be developed as conditions demand and used as the plan and guide for developing major and sub-major highways in and through Pomona, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Pomona, held on the 8th day of January, 1929, by the affirmative vote of at least three Councilmen, to-wit:
AYES: Councilmen McKey, Dunlap, Lindsey (Mayor) Park.
NOES: " None.
ABSENT: " Afflerbaugh.

and signed and approved this 8th day of January, 1929.

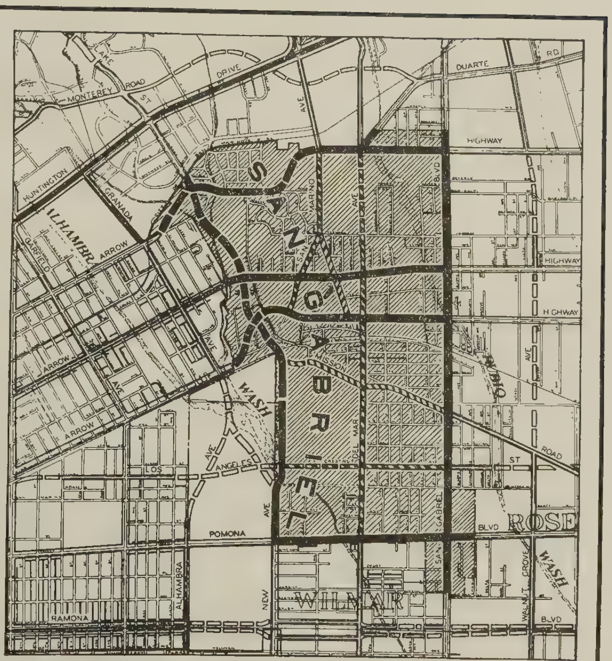
SCHUYLER H. PARK.
Mayor.

ATTEST: T.R. Trotter
City Clerk of the City of Pomona.

CITY OF POMONA

Nestled between the San Jose and Puente Hills, is Pomona, 33 miles east of Los Angeles. Padre Zalvideo came here in 1837 when he named and blessed the Rancho San Jose, newly acquired by the Palomares family. At this time, he held the first mass in the district under an oak tree which still stands on South Kenoak Drive. Urban development was begun in 1874, under the direction of T. A. Garey and L. M. Holt, whose names were given to the two principal thoroughfares. Appropriate indeed was the selection of the name of Pomona, the Roman goddess of fruit, for this section has become the state's richest citrus belt. Fruit packing is the city's chief industry, although there is an increasing amount of manufacturing. Dairying has also become important in recent years, the Pomona Valley supplying about one-eighth of the milk used in Los Angeles. Pomona has seven public parks with a total area of 200 acres. The largest, Ganesha Park in the northwest portion of the city, containing 60 acres, was named for the Hindu god of rain and rivers. It is very highly developed, with recreational features and an open air theatre in a natural bowl of remarkable acoustic properties. In this section the city has begun to push its residential section up into the hills. Farther north are the grounds of the Los Angeles County Fair, which has grown in the short space of seven years to be one of the most important and widely attended exhibitions of agriculture, horticulture and live stock on the Coast, with exhibits from all portions of the state. The plans made by the Regional Planning Commission for the permanent development of the fair grounds are included in the city's major street plan. Several ranches in the immediate vicinity are devoted to the raising of thoroughbred horses. The Kellogg Ranch is unique in breeding only Arabian horses, and attracts many visitors. Pomona has a commission form of government. The planning commission, recently reorganized under the Planning Act of 1929, is concerned at present with zoning the city. Valley Boulevard, from Riverside County to Los Angeles, passes through Pomona. The Pacific Electric Railway gives interurban service to Los Angeles while the Southern Pacific and Union Pacific Railways provide freight and passenger service locally and to the eastern markets.

Area in Square Miles	12.5	Incorporated	1888
Population	25,660	Class	Fifth.
Assessed Valuation,	$16,254,000.00	Elevation	853 ft.



SAN GABRIEL HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J FOX, CHIEF ENGINEER
C.B. GILLAM
HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 N 3000 4000 5000 OCTOBER 1928

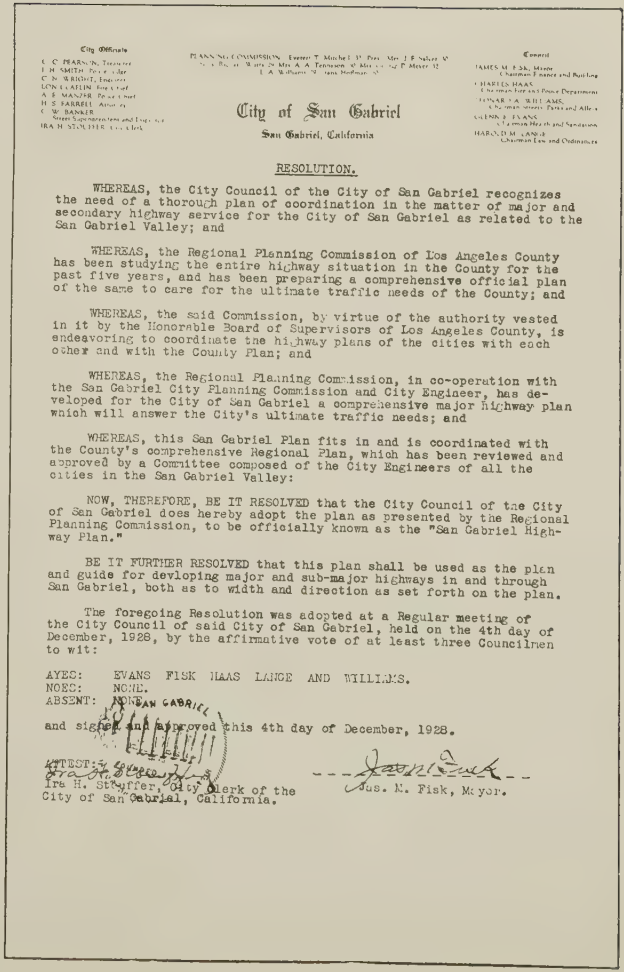
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

·THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY C.N. Wright. CITY ENGINEER
DECEMBER 4, 1928

As per Resolution adopted by the City Council of San Gabriel Dec 4th 1928



City Officials
C. C. PEARSON, Treasurer
J. H. SMITH, Police Judge
C. N. WRIGHT, Engineer
LON L. CAFLIN, Fire Chief
A. E. MANZER, Police Chief
H. S. FARRELL, Attorney
C. W. BANKER
Street Superintendent and Inspector
IRA H. STOUFFER, City Clerk

PLANNING COMMISSION: Everett T. Mitchell '3? Pres. Mrs. J. F. Salver '3? [illegible] Watts '3? Mrs. A. A. Tennyson '30 [illegible] F. Meyer '32 L. A. Williams '29 [illegible] Hoffman '3?

City of San Gabriel

San Gabriel, California

Council
JAMES M. FISK, Mayor
Chairman Finance and Building
CHARLES HAAS
Chairman Fire and Police Department
EDWARD A. WILLIAMS,
Chairman Streets, Parks and Alleys
GLENN E. EVANS
Chairman Health and Sanitation
HAROLD M. LANGE
Chairman Law and Ordinances

RESOLUTION.

WHEREAS, the City Council of the City of San Gabriel recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of San Gabriel as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the San Gabriel City Planning Commission and City Engineer, has developed for the City of San Gabriel a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this San Gabriel Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a Committee composed of the City Engineers of all the cities in the San Gabriel Valley:

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of San Gabriel does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "San Gabriel Highway Plan."

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for devloping major and sub-major highways in and through San Gabriel, both as to width and direction as set forth on the plan.

The foregoing Resolution was adopted at a Regular meeting of the City Council of said City of San Gabriel, held on the 4th day of December, 1928, by the affirmative vote of at least three Councilmen to wit:

AYES: EVANS FISK HAAS LANGE AND WILLIAMS.
NOES: NONE.
ABSENT: NONE.

and signed and approved this 4th day of December, 1928.

SAN GABRIEL

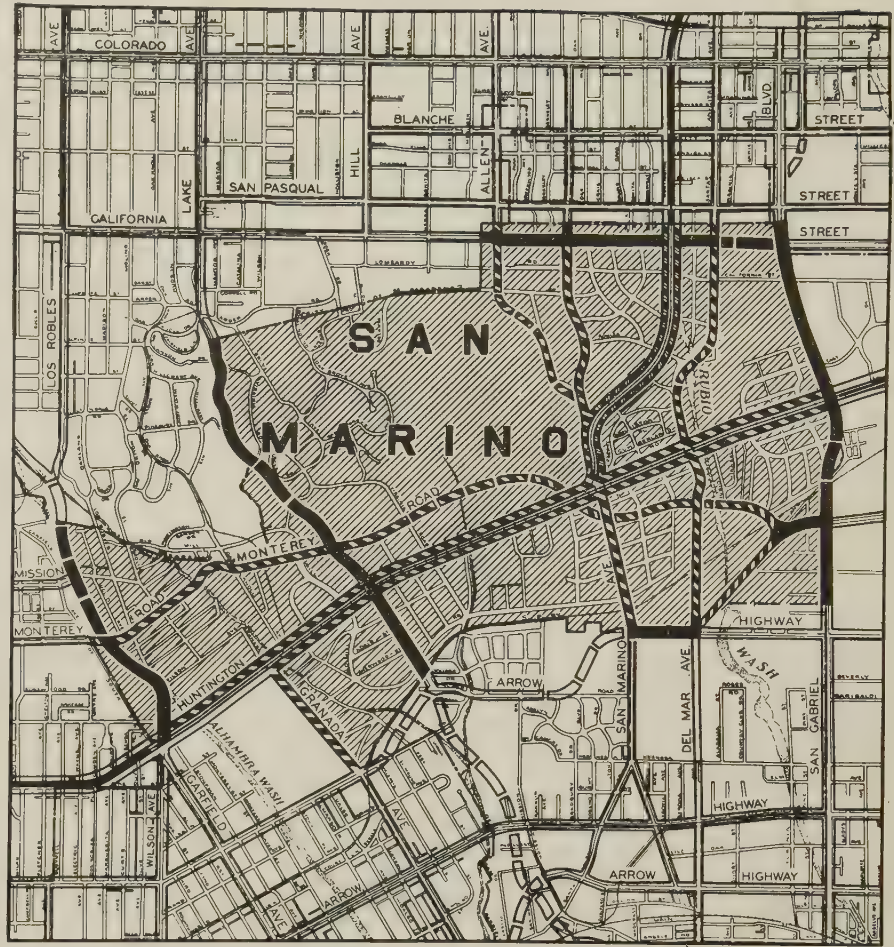
ATTEST: Ira H. Stouffer
Ira H. Stouffer, City Clerk of the City of San Gabriel, California.

Jas. M. Fisk
Jas. M. Fisk, Mayor.

CITY OF SAN GABRIEL

Founded in 1771, Mission San Gabriel, the fourth to be built, and the fifth on the Camino Real from San Diego, was the most wealthy and prosperous of all the missions. About it grew up a Spanish pueblo, the forerunner of the present City of San Gabriel, nine miles east of Los Angeles. Following the usual struggle to establish the mission and convert the Indians, alternating prosperity and dire misfortune were its lot. After secularization, the buildings were plundered and the property sold. Eventually it was returned to the Church and since 1908 has been in charge of the Missionary Sons of the Immaculate Heart of Mary, who have restored some of the buildings and maintain a parochial school. The Mission Play was first performed in April, 1912, following the building of a theatre primarily for its use. Later the new Mission Play House, seating 2,500, was built just around the corner from the remaining mission buildings. Every year thousands of people, Californians and tourists alike, come to see the story of the struggle, triumph and decline of the missions relived on the stage. Mission San Gabriel itself, as well as the old adobe known as Ramona's birthplace, attracts countless visitors to San Gabriel constantly. The oldness and romance of the Spanish days constitute the principal appeal. Yet the city may not live in the past. San Gabriel Country Club, although it is one of the oldest in the Valley, sounds an essentially modern note. New residential sections are developing. But they are part and parcel of the lands the old Mission Fathers selected as the fairest of the fair lands, at a time when they had no hindrance to their selection. The golf course of the Club is well kept, interesting and sporty, but its compelling charm lies in its quiet beauty—peaceful meadows dotted here and there with immense oaks, a sweeping view of the Sierra Madre range in the background. San Gabriel is making plans for the saving of its historic remainders, while the modern presses in from all sides. The development of Arrow Highway, the effect of the final development of San Gabriel Boulevard, and the possibility of the creation of a park along the northerly extension of New Avenue, are some of the problems that are confronting an active planning commission.

Area in Square Miles	3.00	Incorporated	1913
Population	8,000	Class	Sixth
Assessed Valuation,	$6,596,836.00	Elevation	409 ft.



SAN MARINO HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 N 3000 4000 5000 OCTOBER 1928

LEGEND

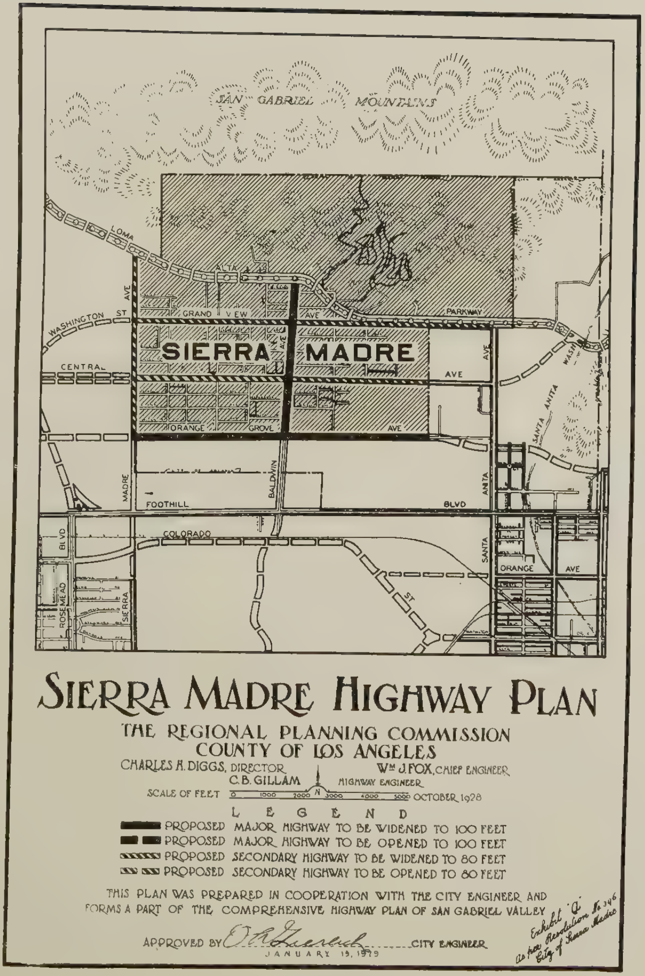
- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET.
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET
- ▨ PROPOSED SECONDARY HIGHWAY ADJACENT TO RAILROAD RIGHTS OF WAY TO BE 71 FEET WIDE.
- ▨ STREETS ADJACENT TO RAILROAD RIGHTS OF WAY TO BE 60 FEET WIDE

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

CITY OF SAN MARINO

Southeasterly of Pasadena, with Huntington Drive as its principal highway, San Marino is developing an exclusively residential community. Famed for the location here of the magnificent Huntington Estate, the city has been more influenced in its growth by the Huntington family's choice of this site than by any other factor. The rolling meadows, oak knolls and verdant orange groves of the district are well shown in the photograph on page 119. The estate comprises 500 acres, and was first developed as a family residence with extensive grounds and gardens set on an elevated knoll about which rolls a sea of orange trees. Before the death of the late Henry E. Huntington, the property was deeded to the public with an endowment, subject to the donor's life interest. The house, now used as an art gallery, contains valuable collections of tapestries, bronzes and furniture, as well as of paintings, the latter especially notable for works of Gainsborough, Romney, Raeburn and Reynolds. The Library, housed in a separate building, is a reference library of source books of English literature, including thousands of manuscripts, valuable first editions of all periods, and most interesting maps. American History is one of the featured sections. The Library building also contains several galleries of early Italian paintings, sculpture and furniture. About this estate, with its aura of refinement and careful development, has grown up a city of extremely desirable, beautiful homes. Generous proportions and appropriate landscaping give San Marino a distinction and charm that is highly prized. The picturesque Old Mill of the Rancho San Pascual, still standing, helps to preserve the spirit of Spanish days. The city has established the site of a civic center where one building has already been erected and occupied. The mayor, the council and the city engineer are ever active in guarding the character and values created in the past, from infringement by improper developments.

Area in Square Miles	3.50	Incorporated . . .	1913
Population	2,500	Class	Sixth
Assessed Valuation,	$10,696,000.00	Elevation	575 ft.



SIERRA MADRE HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H. DIGGS, DIRECTOR
Wm J. FOX, CHIEF ENGINEER
C. B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000
OCTOBER 1928

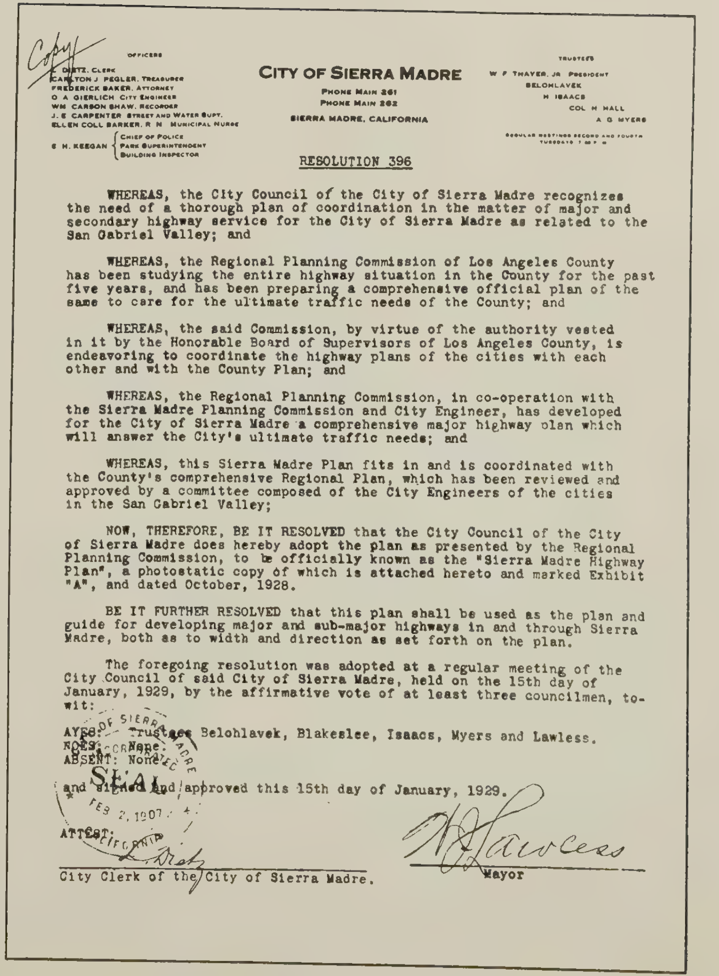
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY O. A. Gierlich CITY ENGINEER
JANUARY 15, 1929

Exhibit "A"
As per Resolution No 396
City of Sierra Madre



Copy

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CARLTON J. PEGLER, TREASURER
FREDERICK BAKER, ATTORNEY
O. A. GIERLICH CITY ENGINEER
WM CARSON SHAW, RECORDER
J. E. CARPENTER STREET AND WATER SUPT.
ELLEN COLL BARKER, R. N. MUNICIPAL NURSE
E. H. KEEGAN { CHIEF OF POLICE
PARK SUPERINTENDENT
BUILDING INSPECTOR

CITY OF SIERRA MADRE
PHONE MAIN 261
PHONE MAIN 262
SIERRA MADRE, CALIFORNIA

TRUSTEES
W. F. THAYER, JR. PRESIDENT
BELOHLAVEK
H. ISAACS
COL. H. HALL
A. G. MYERS
REGULAR MEETINGS SECOND AND FOURTH TUESDAYS 7:30 P. M.

RESOLUTION 396

WHEREAS, the City Council of the City of Sierra Madre recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of Sierra Madre as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in co-operation with the Sierra Madre Planning Commission and City Engineer, has developed for the City of Sierra Madre a comprehensive major highway plan which will answer the City's ultimate traffic needs; and

WHEREAS, this Sierra Madre Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sierra Madre does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "Sierra Madre Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through Sierra Madre, both as to width and direction as set forth on the plan.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of Sierra Madre, held on the 15th day of January, 1929, by the affirmative vote of at least three councilmen, to-wit:

AYES: Trustees Belohlavek, Blakeslee, Isaacs, Myers and Lawless.
NOES: None.
ABSENT: None.

SEAL
FEB 2, 1907

and signed and approved this 15th day of January, 1929.

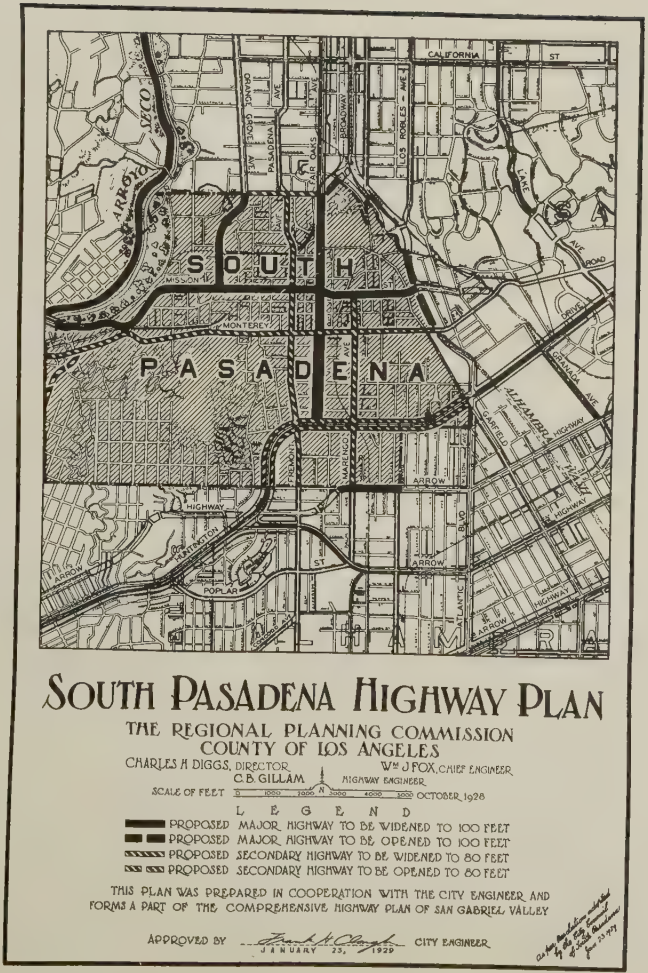
ATTEST:
L. Dietz
City Clerk of the City of Sierra Madre.

W J Lawless
Mayor

CITY OF SIERRA MADRE

Northeast of Pasadena and adjoining Arcadia and Monrovia, the foothill residential community of Sierra Madre looks out across the oak-covered Baldwin Ranch upon the busy cities of the Western San Gabriel Valley. The setting is ideal for the development of homes comparatively remote from the noise and congestion of the city. Topography varies from the open sunny slopes above Foothill Boulevard to the shaded canyons and steep rocky hillsides that appeal to those who enjoy the ruggedness of the mountains. For all of its seeming isolation, Sierra Madre is actually a close-in suburb, being served by a branch of the Pacific Electric from the fast Pasadena lines. Present highways make access to this city easy enough although the through route of Foothill Boulevard passes by a mile to the south. Highways planned for this section will tie it more closely to the major east and west lines of travel without sacrificing any of its desirable seclusion. The development of Alta Loma Drive as a parkway section of the future Foothill Boulevard system, will indeed enhance and make more available the beauty of Sierra Madre's setting. Natural features, including the brilliant sunlight, have made the place popular with artists to some extent, thus contributing a somewhat distinctive note that might well be added to the composition of many other communities in Southern California. Governed by a mayor and council, Sierra Madre is fortunate in having an ever active planning commission, which has spent much of its time in developing those characteristics which accentuate the beauty of the site. Street tree planting has appropriately received considerable attention in this city of homes and gardens. The business section is well confined to the district at the end of the interurban line, leaving the balance of the developed portion of the city almost completely devoted to residential use.

Area in Square Miles	2.94	Incorporated	1907
Population	6,000	Class	Sixth
Assessed Valuation,	$3,758,000.00	Elevation	825 ft.



SOUTH PASADENA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES
CHARLES H DIGGS, DIRECTOR
W^M J FOX, CHIEF ENGINEER
C.B. GILLAM HIGHWAY ENGINEER
SCALE OF FEET 0 1000 2000 3000 4000 5000 OCTOBER 1928

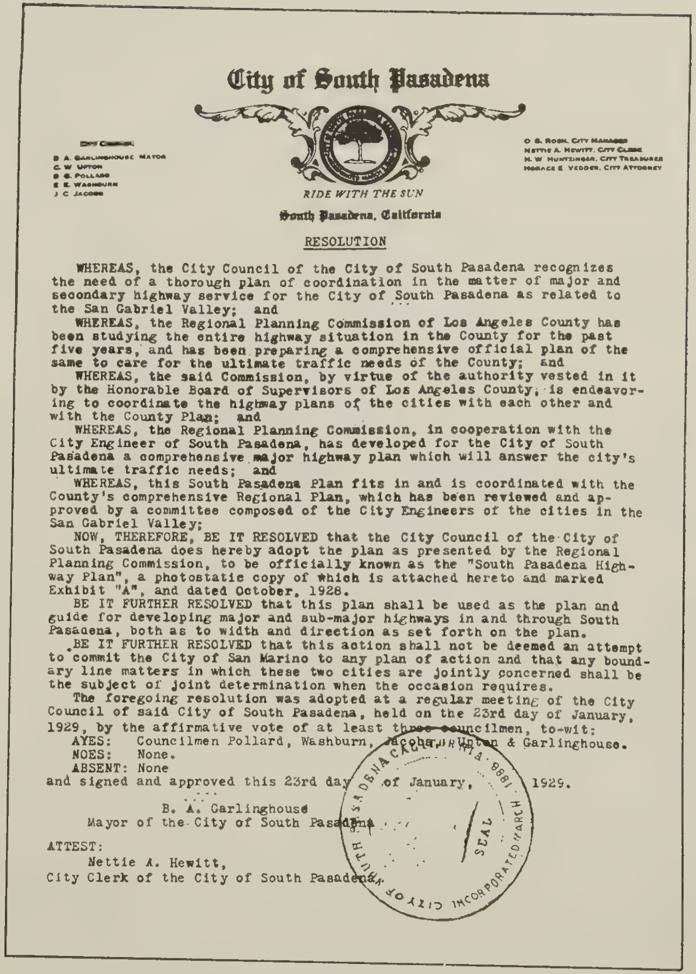
L E G E N D

- ▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
- ▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
- ▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
- ▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Frank H. Clough CITY ENGINEER
JANUARY 23, 1929

As per resolution adopted by the City Council of South Pasadena Jan 23 1929



City of South Pasadena

City Council
B. A. Garlinghouse Mayor
C. W. Upton
P. G. Pollard
E. E. Washburn
J. C. Jacobs

O. S. Rohl, City Manager
Nettie A. Hewitt, City Clerk
H. W. Huntzinger, City Treasurer
Horace E. Vedder, City Attorney

RIDE WITH THE SUN

South Pasadena, California

RESOLUTION

WHEREAS, the City Council of the City of South Pasadena recognizes the need of a thorough plan of coordination in the matter of major and secondary highway service for the City of South Pasadena as related to the San Gabriel Valley; and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate traffic needs of the County; and

WHEREAS, the said Commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to coordinate the highway plans of the cities with each other and with the County Plan; and

WHEREAS, the Regional Planning Commission, in cooperation with the City Engineer of South Pasadena, has developed for the City of South Pasadena a comprehensive major highway plan which will answer the city's ultimate traffic needs; and

WHEREAS, this South Pasadena Plan fits in and is coordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of South Pasadena does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "South Pasadena Highway Plan", a photostatic copy of which is attached hereto and marked Exhibit "A", and dated October, 1928.

BE IT FURTHER RESOLVED that this plan shall be used as the plan and guide for developing major and sub-major highways in and through South Pasadena, both as to width and direction as set forth on the plan.

BE IT FURTHER RESOLVED that this action shall not be deemed an attempt to commit the City of San Marino to any plan of action and that any boundary line matters in which these two cities are jointly concerned shall be the subject of joint determination when the occasion requires.

The foregoing resolution was adopted at a regular meeting of the City Council of said City of South Pasadena, held on the 23rd day of January, 1929, by the affirmative vote of at least three councilmen, to-wit:

AYES: Councilmen Pollard, Washburn, Jacobs, Upton & Garlinghouse.
NOES: None.
ABSENT: None

and signed and approved this 23rd day of January, 1929.

B. A. Garlinghouse
Mayor of the City of South Pasadena

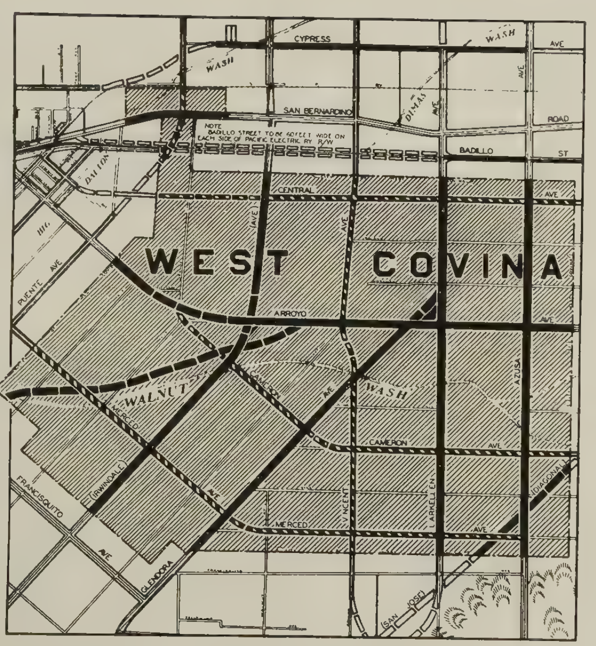
ATTEST:
Nettie A. Hewitt,
City Clerk of the City of South Pasadena.

SEAL 1888

CITY OF SOUTH PASADENA

Nine miles from the center of Los Angeles, and separated from it by the Arroyo Seco and the rolling San Rafael Hills, South Pasadena is a favorite place of residence for people engaged in business in either Los Angeles or Pasadena. This is due to a number of circumstances, chief of which is the excellent transportation system. The Pacific Electric Railway gives South Pasadena the benefit of its fast Pasadena lines, as well as a separate line to Los Angeles. The good school system with its excellent High School doubtless is an attraction to many home-seekers. Joined on two sides by the high-class residential sections of Pasadena and San Marino, on the south by the residence section of Alhambra and bounded on the west by the arroyo, South Pasadena is almost entirely free from the danger of encroachment by manufacturing and is yet close enough to industrial areas to provide a convenient dwelling place for those engaged in industry. Moreover, South Pasadena enjoys the distinction of having ten percent of its area set aside for parks. It is true that the larger portion of this park area, that in the arroyo, is as yet not entirely developed. The foresight shown in acquiring this property in advance at reasonable cost, however, might well be an example to many California cities. Great possibilities and privileges await South Pasadena in the wise development of this park, either as a great recreational area similar to Brookside Park or as a more natural reservation further developed along the lines of its present use. The city has grown slowly without a city plan, and has no planning commission; all matters pertaining to city planning are acted upon by the city council. It is highly probable that there will be a tremendous conversion of property in the future, when a very large percentage of the residential area will gradually be given over to apartment house uses. With proper city planning, such districts can be made highly desirable and of permanent value to the city both socially and economically. Topography has made the solution of the major highway problem unusual and difficult as may be noted in the absence of major streets in the southwest quarter of the city where a totally unsuitable gridiron street system has lain undeveloped on the steep hillsides for some years. Monterey Road has a function of increasing importance in its position as the least congested direct route connecting the San Gabriel and San Fernando Valleys.

Area in Square Miles	3.14	Incorporated	1886
Population	15,000	Class	Sixth
Assessed Valuation,	$14,715,000.00	Elevation	.662 ft.



WEST COVINA HIGHWAY PLAN

THE REGIONAL PLANNING COMMISSION
COUNTY OF LOS ANGELES

CHARLES H DIGGS, DIRECTOR
Wm J FOX, CHIEF ENGINEER
C.B GILLAM HIGHWAY ENGINEER

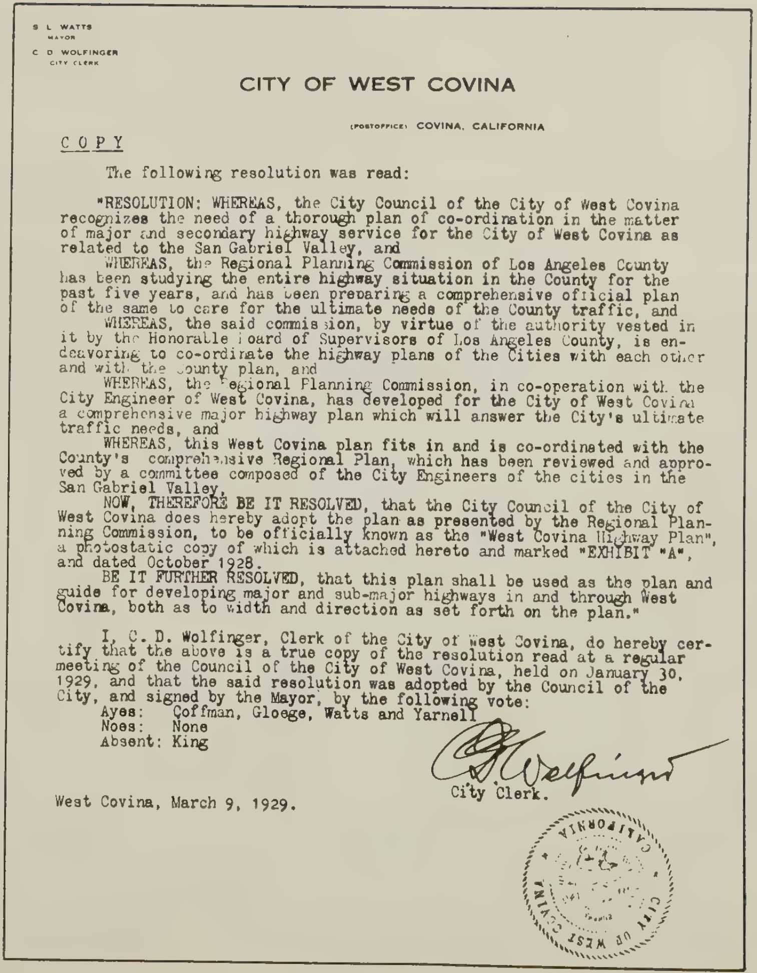
SCALE OF FEET 0 1000 2000 N 3000 4000 5000 OCTOBER 1928

L E G E N D

▬ PROPOSED MAJOR HIGHWAY TO BE WIDENED TO 100 FEET
▬ ▬ PROPOSED MAJOR HIGHWAY TO BE OPENED TO 100 FEET
▨ PROPOSED SECONDARY HIGHWAY TO BE WIDENED TO 80 FEET
▨ ▨ PROPOSED SECONDARY HIGHWAY TO BE OPENED TO 80 FEET

THIS PLAN WAS PREPARED IN COOPERATION WITH THE CITY ENGINEER AND FORMS A PART OF THE COMPREHENSIVE HIGHWAY PLAN OF SAN GABRIEL VALLEY

APPROVED BY Wayne Weaver CITY ENGINEER



S L WATTS
MAYOR
C D WOLFINGER
CITY CLERK

CITY OF WEST COVINA

(POSTOFFICE) COVINA, CALIFORNIA

C O P Y

The following resolution was read:

"RESOLUTION: WHEREAS, the City Council of the City of West Covina recognizes the need of a thorough plan of co-ordination in the matter of major and secondary highway service for the City of West Covina as related to the San Gabriel Valley, and

WHEREAS, the Regional Planning Commission of Los Angeles County has been studying the entire highway situation in the County for the past five years, and has been preparing a comprehensive official plan of the same to care for the ultimate needs of the County traffic, and

WHEREAS, the said commission, by virtue of the authority vested in it by the Honorable Board of Supervisors of Los Angeles County, is endeavoring to co-ordinate the highway plans of the Cities with each other and with the County plan, and

WHEREAS, the Regional Planning Commission, in co-operation with the City Engineer of West Covina, has developed for the City of West Covina a comprehensive major highway plan which will answer the City's ultimate traffic needs, and

WHEREAS, this West Covina plan fits in and is co-ordinated with the County's comprehensive Regional Plan, which has been reviewed and approved by a committee composed of the City Engineers of the cities in the San Gabriel Valley,

NOW, THEREFORE BE IT RESOLVED, that the City Council of the City of West Covina does hereby adopt the plan as presented by the Regional Planning Commission, to be officially known as the "West Covina Highway Plan", a photostatic copy of which is attached hereto and marked "EXHIBIT "A", and dated October 1928.

BE IT FURTHER RESOLVED, that this plan shall be used as the plan and guide for developing major and sub-major highways in and through West Covina, both as to width and direction as set forth on the plan."

I, C. D. Wolfinger, Clerk of the City of West Covina, do hereby certify that the above is a true copy of the resolution read at a regular meeting of the Council of the City of West Covina, held on January 30, 1929, and that the said resolution was adopted by the Council of the City, and signed by the Mayor, by the following vote:

Ayes: Coffman, Gloege, Watts and Yarnell
Noes: None
Absent: King

C D Wolfinger
City Clerk.

West Covina, March 9, 1929.

CITY OF WEST COVINA

A truly unique city is West Covina, whose eight square miles of territory are devoted exclusively to farming. Located at the center of the Valley, it has not a single recorded city lot, nor any railroad, except that the Claremont-Pomona line of the Pacific Electric Railway and the Covina branch of the Southern Pacific Railroad pass across a narrow arm of the city that extends toward the town of Baldwin Park. While there are some citrus groves in the city, the chief crop is walnuts, as in the territory surrounding, particularly to the west. The government is carried on by a mayor and city council. There is, as yet, no city planning commission, which is regretable in view of the city's future responsibilities. But it is not yet too late, for the complete lack of urban conditions gives an unparalleled opportunity to plan the development of the entire area from the beginning, without having to contend with the correction of past mistakes. This is a privilege shared by very few municipal corporations, if any. West Covina will be fortunate, indeed, if this opportunity is seized while there is yet time. Here is the chance to create wide through-traffic streets where needed with complete control of the type of development, to arrange local residential streets to the best advantage, to secure parks in advance at reasonable cost and in strategic locations, to provide proper school facilities according to a predetermined plan, to apply the principles of zoning and design of property for planned uses, in short, to build a city that is right all the way through. Several important major highways are being developed to and through West Covina. One of the most important is the proposed Garvey-Holt route between Pomona and Los Angeles, which has some scenic possibilities where it passes through this city as well as at other points. Careful city planning can make West Covina the outstanding city in this entire Valley.

Area in Square Miles	8.0	Incorporated	1923
Population	800	Class	Sixth
Assessed Valuation,	$2,628,000.00	Elevation	375 ft.

APPROVAL BY COUNTY AUTHORITIES

When these resolutions of approval by the various cities in the San Gabriel Valley had been secured, it remained only to present the Regional Plan of Highways for this area to the governing authorities of the County. Other departments of the County government interested in this plan had been kept in constant touch with the work of developing it. The County Road Commissioner and the County Surveyor have given untiringly of their assistance and counsel. With their cooperation and with the approval of the administrative authorities of the cities, the Commission was able to go before the Board of Supervisors with a comprehensive plan for the Valley that was not only basically sound, but included a workable highway plan for each of the incorporated areas. The Board set a time for a Hearing on this matter, and on July 16, 1929, passed the Resolution of Approval which is reproduced in full on page iv. This approval, and the support which the Commission has received from all up to this point, are largely due to the adoption at the outset of sound conservative policies, and to the conscientious effort made at all times to base decisions upon engineering data and the advice of trained technical men.

HIGHWAY PLAN A GUIDE FOR THE FUTURE

The present plan for the highways in the San Gabriel Valley is one unit of the comprehensive plan for the whole of Los Angeles County, now in preparation. It has now been agreed upon by the administrative bodies concerned as a guide for future construction. Careful adherence to the plan, and attention to its recommendations by those concerned with appropriations for public works, approvals of street layouts, and other similar matters, will bring out its full value to every individual as well as to the region as a whole. The cooperation which the Commission has received from State, County and City departments, which have adhered to the Plan in the construction of major and secondary highways, is most gratifying, and demonstrates its soundness and its value. Changes should be allowed only after thoughtful consideration, and by agreement of all concerned. They should be made a matter of official record. Under these conditions, the plan will be a living thing that will grow as we grow, always in line with the changing needs of the community, rather than an arbitrary list of projects for immediate execution.

PROTECTION OF THE PLAN

In presenting this plan to the public, it is no part of the intention of the Commission that it should be considered simply as something to be read and then filed away in the archives. After the creation and approval of a plan, the third step, of those referred to on page 95, still remains—the *accomplishment* of the things proposed. Without this, the plan has no value whatever. The Commission, however, acts only in an advisory capacity, and while it is willing to assist in every way, it must depend upon the active cooperation of the people of the San Gabriel Valley for the progress made from now on. Unofficial agencies, such as civic improvement associations and clubs, should work together continuously to secure for this great Valley the benefit that will follow the wise control of its physical growth and development. The responsibility for the initiation of projects will fall in a large degree upon property owners, and the successful carrying out of all engineering phases of the plan will be the duty of the various local authorities. Comprehensive city plans involving greater detail ought to be prepared by each of the cities; in every community zoning ordinances should be drafted and enacted to preserve each parcel of land for its best and highest use; uniform regulations for new land subdivisions should be adopted, and adequate provision should be made for recreational and other public needs.

PROGRAM OF CONSTRUCTION NEEDED

It is highly desirable, too, that a program of highway construction for the next five years should be adopted as a final step in systematizing the expenditure of public funds. If such a program is prepared, with a properly drawn budget, the execution of the Plan will not mean any increase in normal annual expenditures for improvements, but will merely involve the wise choice of projects upon which the money is to be spent. The highways selected should be those important and outstanding roads whose immediate completion would serve most effectively the needs of the general public. Then each project will be considered on its merits and urgency, and will take its logical place in the orderly sequence of a carefully thought out program. Such is the next task before the people of this great Valley, one in which the Regional Planning Commission may function as a central, coordinating agency, through which all other agencies may come to an agreement as to a definite plan of action leading toward the accomplishment of the Plan.

POPULAR SUPPORT IS VITAL

Regional planning safeguards the growth of the community, and assures the effective investment of its funds. It endeavors to foresee the greatness of the community that will be several decades hence. It aims to provide for the orderly economic development of effective and convenient means of transportation and communication, without the sacrifice of any of the County's natural assets as a good place in which to live and work. Under modern conditions, it is no longer possible to achieve these ends within the boundaries fixed for the purposes of local government. No community in this great metropolitan district can thrive alone. Each depends upon the prosperity of the County as a whole. Regional planning aims to supplement local plans, supplying a means of coordination between communities and providing for undeveloped areas the same careful attention in *advance* of urban growth. The problems of city and regional planning are different in many respects; the one frequently involving costly alterations, the other seeking to prevent the beginning of undesirable conditions. The benefits of the latter method come to every individual as well as to the region as a whole. The welfare of those who make up the population of this region is after all the primary objective of all planning, and it is to the ordinary citizen and home-owner that the execution of any plan must be entrusted. The Commission desires therefore to urge upon everyone concerned in the development of the San Gabriel Valley the necessity of accepting and protecting this as his own individual plan, and of working steadfastly for its accomplishment.

> *The process of planning, of looking ahead and anticipating future needs is the only assured method of developing a community so that its parts will fit together, its circulation will be active and its whole outward aspect will reflect the intelligence and culture of those who live in it.*
>
> *L. Deming Tilton.*

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Los Angeles County,
Regional Planning C
A comprehensive
report on the
regional plan of
highways

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